Report of the
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of Health on

1970
Supplement No. 6

Report of the activities ... Supplement ...

Health Care Delivery Systems

Rehabilitation Services

Ontario Department of Health
Honourable A. B. R. Lawrence, M.C., Q.C., Minister

HEALTH CARE DELIVERY SYSTEMS

Rehabilitation Services

ONTARIO

REPORT OF THE ONTARIO COUNCIL OF HEALTH

on

HEALTH CARE DELIVERY SYSTEMS

REHABILITATION SERVICES

1970

SUPPLEMENT NO. 6

ONTARIO DEPARTMENT OF HEALTH
Honourable A. B. R. Lawrence, M.C., Q.C., Minister

THE ONTARIO COUNCIL OF HEALTH

The Ontario Council of Health was formed in 1966 as the senior advisory body on health matters to the Minister of Health and, through him, to the Government of Ontario. Council submits recommendations designed to support the overall thrust toward improved health services and it serves as a sentinel to ensure effective and economical employment of the human and physical elements required to provide these services.

The members of Council are selected to reflect a reasonable balance of public interest, expert knowledge, experience, and geographic distribution. In keeping with Council's ongoing role, members are appointed for three years on a rotational basis and may be reappointed once.

Council determines its work priorities through assessment of provincial health services requirements, tempered from time to time by more urgent requests. The successful completion of its assignments is dependent upon the able assistance of committees, sub-committees and task forces manned from the ample reservoir of health interest and expertise to be found in individuals throughout Ontario.

MEMBERS OF THE ONTARIO COUNCIL OF HEALTH

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J. R. Evans, M.D., D.Phil. (Oxon), F.R.C.P. (C), F.A.C.P.	Dean, Faculty of Medicine, Principal, Health Sciences, McMaster University, Hamilton
Mrs. J. P. Forrester, B.A.	Belleville
Rev. R. Guindon, O.M.I., B.A., L.Ph., S.T.D., LL.D.	Recteur, Université d'Ottawa
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W. F. J. Anderson (Executive Secretary)	*The Ontario Council of Health, Hepburn Block, Parliament Buildings, Toronto*

* Term expired November 1970

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THE ONTARIO COUNCIL OF HEALTH IN 1970

A first "Report on the Activities of the Ontario Council of Health" was published during 1970. It consisted of a summary document with eight separate annexes containing individual committee reports and recommendations as acted upon by Council. The period covered was from Council's formation in 1966 through the calendar year 1969.

SUPPLEMENTS FOR 1970 – GENERAL

The initial report has proven useful to many individuals and groups concerned with the health care of the people of Ontario. It was therefore decided to make available the major committee reports and recommendations which were processed through Council during 1970. This was substantially a continuation of the work initiated during the first report period, relating directly to committees identified in the annexes. Therefore, it was decided to issue the new report in the form of nine separate supplements, of which this document is one. These supplements, cross-referenced to their original annexes by title, are listed below:

Supplement No. 1
Regional Organization of Health Services
Part II – A Proposed System

Supplement No. 2
Health Statistics
Part II – Implementation of a Health Statistics System

Supplement No. 3
Health Manpower
A. The Need for Family Physicians and General Practitioners for the Province of Ontario
B. Assistance for the Primary Care Physician

Supplement No. 4
Library and Information Services
Library Personnel, Manpower and Education

Supplement No. 5
Health Care Delivery Systems
Community Health Care

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1970 SUPPLEMENT – REHABILITATION SERVICES

This report of the Sub-committee on Rehabilitation Services was presented to the Ontario Council of Health in June 1970. Council approved the principles associated with the recommendations as set forth in this report.

The Sub-committee on Rehabilitation Services was set up as a Sub-committee of the Committee on Health Care Delivery Systems. It was given broad terms of reference—to develop proposals relating to rehabilitation services in Ontario.

The Sub-committee agreed that rehabilitation should be defined as "A process of enabling the person to reach or regain his maximum potential." It was also agreed that this process would encompass health, educational, vocational, and social aspects as an integral part of the total programme.

The Sub-committee reviewed the relevant literature, examined the work of other committees and commissions and obtained advice from experts on various aspects of the rehabilitation process, as well as studying the practices of government departments and other agencies involved in providing rehabilitation care.

The Sub-committee attempted to define the deficiencies in type, quality, and quantity of service available through the present organization structure and methods of financing of rehabilitation care. Alternative solutions have been studied, and recommendations made concerning the development of a future system, recognizing the need to make the best possible use of the limited resources of manpower, facilities, and funds. The goal of the Sub-committee was to develop an organizational structure and a comprehensive range of services which would provide the best possible rehabilitation care to the people of Ontario.

OTHER AREAS OF COUNCIL ACTIVITY

It will be noted that 1970 supplements to three annexes of the first report have not been issued – Physical Resources, Education of the Health Disciplines, and Health Research:

Physical Resources

In the original annex, the Committee reviewed the current situation and the related services in Ontario which affect physical resources; it highlighted some of the difficulties which exist with respect to the components of the present pattern and made certain recommendations. This completed Council action in this important area, at this stage.

Education of the Health Disciplines

Continued study has been carried out by the Committee. This has been directed primarily toward assessment of the educational requirements for the rehabilitation disciplines and a further report in the area of nursing education. These documents will be completed for presentation to Council in 1971.

Health Research

The Committee on Health Research has continued its work on the definition of the provincial role in health research. It has been devoting its attention particularly to such areas as the economics of health research; the co-ordination of health research programmes within the province, sponsored by both governmental and voluntary agencies; and the personnel support requirements needed to maintain a viable health research programme. It is anticipated that these matters will be completed in 1971.

The Committee has continued to provide direct advice to the Province on applications for financial assistance, through its Sub-committees on Research Grants Review and Demonstration Models.

During 1970, the Council initiated activity and is developing reports in the following areas:

Audio Visual Systems

The Sub-committee on Audio Visual Systems began work in March, looking into provincial requirements for instructional media systems in the education of the health disciplines, health services, and public health education.

Perinatal Problems

The Sub-committee on Perinatal Problems was established in May to give consideration to problems surrounding birth and affecting either/or mother and infant, and developing proposals for improved health services in this area.

Environmental Quality

A primary Committee on Environmental Quality was set up in October to make recommendations to the government on all matters related to the quality of the human environment, with special consideration to the health and well-being of people.

Future Arrangements for Health Education

In November, Council approved the establishment of a task force to investigate the need for a new medical school/health sciences centre, giving due consideration to new approaches to health education. The relation of health education to health services and the effect of this on the community, not the projected manpower requirements alone, will provide the basis for the study.

Two other undertakings by Council should be noted:

Committee on the Healing Arts Review

A special request was made to Council in June to review the Report

of the Committee on the Healing Arts. A review group was established and it reported to Council in November. It proposed certain basic principles related to the regulation and education of the health disciplines and these, as approved by Council, were submitted to the Minister of Health.

Conference on Co-operation in the Provision of Health Services

In April, Council took an active part in a Conference on Co-operation in the Provision of Health Services, sponsored by provincial bodies representing the various health disciplines, consumers, and the Department of Health. In the public interest, it is Council's policy to consult freely with representatives of health professions, related organizations, and others who share the common bond of seeking the best possible health services for the people of Ontario. This process also occurs as part of the work of the committees of Council.

MEMBERS OF COMMITTEE ON HEALTH CARE DELIVERY SYSTEMS

Dr. K. C. Charron, Chairman	Deputy Minister of Health
Miss C. Aikin	Dean, School of Nursing, The University of Western Ontario
Mr. R. Auld	Executive Director, Ontario Society for Crippled Children
Dr. E. H. Botterell	Dean, Faculty of Medicine, Queen's University
Dr. Carol Buck	Professor and Chairman, Department of Community Medicine, The University of Western Ontario
Dr. W. J. Dunn	Dean, Faculty of Dentistry, The University of Western Ontario
Dr. T. L. Jones	Ontario Veterinary College, University of Guelph
Dr. R. I. Macdonald	Consultant in Medicine, Toronto
Mr. S. W. Martin	Chairman, Ontario Hospital Services Commission
Dr. J. F. Mustard	Professor of Pathology, McMaster University
Mr. G. W. Phelps	Orillia. Formerly President, Ontario Hospital Association
Mr. F. A. Wilson	Vice-President, Parke and Parke Limited

MEMBERS OF THE SUB-COMMITTEE ON REHABILITATION SERVICES

Dr. C. A. Roberts Chairman	Professor and Chairman, Department of Psychiatry, University of Ottawa; Psychiatrist-in-Chief, Royal Ottawa Hospital
Mrs. Joan Bernd (retired December 1969)	Executive Secretary/Consultant Canadian Association of Occupational Therapy, Toronto
Dr. A. G. Cecutti	Family Physician, Sudbury
Miss Muriel Driver (since January 1970)	Senior Teacher and Lecturer of Occupational Therapy, School of Rehabilitation Therapy, Queen's University, Kingston; Director, Occupational Therapy, Kingston General Hospital
Dr. John E. Hall	Assistant Professor of Surgery, University of Toronto; Orthopaedic Surgeon, Hospital for Sick Children
Miss W. Herington	Professor, School of Social Work, University of Toronto
Miss H. Saarinen	Professional Consultant, Canadian Physiotherapy Association, Toronto
Dr. John C. Sibley	Associate Professor of Medicine; Assistant to the Vice-President, Division of Health Sciences, McMaster University, Hamilton

Dr. Bruce H. Young	Assistant Medical Director, Ontario Society for Crippled Children and Ontario Crippled Children's Centre, Toronto
Mrs. J. L. Pearson, Secretary	*Ontario Council of Health Secretariat*

ACKNOWLEDGEMENTS

Technical support in the preparation of this report was provided through the auspices of the Research and Planning Branch of the Ontario Department of Health. Under Dr. G. W. Reid, Director, the following staff members worked with the Sub-committee:

Mrs. H. J. Bain	Senior Research Officer (Economics)
Dr. E. D. McEwan	Chief of Health Sciences
Dr. M. Shackleton	Assistant Research and Planning Officer (Medical)
Dr. W. D. Wigle	Research and Planning Officer (Medical)

Additional technical support was received from:

Mr. A. Atkins	Consultant, Rehabilitation, Hospital Programmes, Ontario Hospital Services Commission
Mrs. M. F. Trider	Officer-in-charge, Medical Rehabilitation Section, Ontario Department of Health

Acknowledgement is also given for the assistance provided by many leading university, hospital, and other personnel in the rehabilitation field, who contributed generously of their time and experience.

Recommendations

RECOMMENDATIONS
Supplement No. 6
HEALTH CARE DELIVERY SYSTEMS
REHABILITATION SERVICES

COUNCIL ACTION

The Ontario Council of Health has approved the principles associated with the recommendations of the 1970 report of the Sub-committee on Rehabilitation Services, as listed below.

RECOMMENDATIONS

Value and Scope of Rehabilitation

1. THAT the Government of Ontario place new emphasis on the planned provision of comprehensive rehabilitation programmes, recognizing the rights of all residents of Ontario to achieve their maximum capacity for living, regardless of their economic potential.

2. THAT comprehensive rehabilitation programmes be organized so as to effectively include health, educational, vocational, and social aspects.

3. THAT the *health aspects* of comprehensive rehabilitation programmes be organized so as to effectively include physical, mental, psychological, and social components.

4. THAT the system for the provision of rehabilitation be developed on the basis of the "Programme Concept" (rather than on the traditional hospital, agency, or disease basis).

5. THAT a Director of Rehabilitation be appointed to the staff of the Department of Health. He would be of executive director status; he would co-ordinate the rehabilitation activities of the various departments and agencies of the Provincial Government and assist the regional rehabilitation committees in carrying out their functions. He would not be responsible for programme administration.

6. THAT the Director of Rehabilitation be assisted in performing his role by a committee of expert representatives from the Departments of Education, Labour, Health, and Social and Family Services, and the Ontario Hospital Services Commission.

7. THAT financial arrangements be instituted for the funding of rehabilitation services on the basis of the "Programme Concept" rather than on the present basis.

8. THAT the effectiveness of rehabilitation services operated by both public and private agencies be analysed and that the results of these analyses be considered in the continued government funding of these rehabilitation services.

9. THAT a regional system for the delivery of rehabilitation services be developed within the framework of the regional organization of total health services.

10. THAT rehabilitation committees be established at the regional and district levels to perform the functions outlined in Recommendations 12 and 13.

11. THAT, at the provincial level, the following functions be performed within a regional system for the delivery of rehabilitation care:

    (a) overall planning and co-ordination of rehabilitation programmes, and the setting of provincial goals, standards, and policies for the deployment and financing of such programmes.

    (b) establishing provincial priorities.

    (c) interpreting provincial policy, and providing guidance, advice, information, and direction to the regional level.

    (d) instituting appropriate controls.

    (e) collecting data and evaluating the effectiveness of the system.

(f) collecting data and disseminating information on the functions, staffing, and design of rehabilitation facilities.

12. THAT regional rehabilitation committees perform the following functions in a regional system for the delivery of rehabilitation care, as part of regional health councils and within provincial policy, standards, and guidelines:

(a) defining regional goals and objectives, based on the characteristics of the region and taking cognizance of the objectives of the individual districts within the region.

(b) developing plans on a district and regional basis for the provision of programmes to meet these objectives.

(c) co-ordinating programmes and identifying programme needs.

(d) setting priorities.

(e) identifying the resources of finances, facilities, agencies and manpower, defining roles within rehabilitation programmes of public and voluntary agencies, and deploying resources including manpower so that these programme needs may be met, and so that operational co-ordination will be possible.

(f) ensuring that information about available rehabilitation programmes is provided.

(g) overseeing the effective operation of the rehabilitation system within the region.

13. THAT district rehabilitation committees perform the following functions in a regional system for the delivery of rehabilitation care, as part of district health councils and within the framework of provincial policy and the regional planning programme:

(a) participating with the regional rehabilitation council in defining district needs and objectives.

(b) consulting with the providers and consumers of health care in the district in planning rehabilitation programmes.

(c) co-ordinating the efforts of those organizations providing rehabilitation programmes to ensure the effective use of

resources in meeting district priorities.

(d) acting as the link between the individual patient and any other level in the rehabilitation system, particularly when any problem arises.

14. THAT resources be made available for properly designed epidemiological and statistical studies to determine the incidence and prevalence of handicapping conditions so that rehabilitation programmes may be effectively planned and evaluated.

15. THAT registers of certain handicapping conditions be established and present registries extended to form the basis for statistical studies as well as to assist in the provision of continuing care.

16. THAT the division of the recipients of rehabilitation services into age groupings be recognized as useful for administrative convenience only, and that the boundaries of the age groupings be flexible to permit actual patient needs to be met.

17. THAT, in instances of doubt, the final decision concerning the care of a patient in facilities and programmes not designed primarily for his age group be left to a multi-disciplinary screening team at the regional level.

18. THAT a comprehensive range of rehabilitation programmes be developed within each region and that the team concept be emphasized so that a continuum of care can be provided for all patients requiring health, educational, vocational, and social rehabilitation, from first contact with the system until maximum potential is reached.

19. THAT a regional rehabilitation centre for both in-patients and out-patients be developed in each region.

20. THAT each regional centre have an independent regional identity, be associated with the university health sciences centre where available, and be in juxtaposition to an active treatment general hospital.

21. THAT other general hospitals provide as full a range of rehabilitation services as is required for the needs of an active treatment hospital, and that the rehabilitation services provided by them be complementary to those of the regional

rehabilitation centres.

22. THAT, where justified by district needs, district rehabilitation programmes or centres be established, with the services provided being complementary to those of the regional rehabilitation centres.

23. THAT hostel accommodation be provided in association with the rehabilitation centres and that the funding of hostels be the responsibility of the Province.

24. THAT transportation services be made available by rehabilitation centres for patients involved in rehabilitation programmes, where warranted by the patient's condition and authorized by the centre, and that such services be paid for by the Province.

25. THAT rehabilitation services accept referrals from public and private agencies concerned with health or social services for assessment of a patient's needs as well as from private physicians.

26. THAT multi-discipline assessment teams be established as needed by regional or district rehabilitation committees and that the composition of these teams be determined by individual patient needs.

27. THAT provincial benefits be extended to include prosthetic and orthotic appliances and devices prescribed by a physician for a patient's rehabilitation.

28. THAT the regional rehabilitation centres act as referral centres for their region in providing information as to prosthetic and orthotic services available.

29. THAT the regional rehabilitation centres determine the need for prosthetic and orthotic services and establish facilities for these services where the need is not being met.

30. THAT the Province continue to support biomedical engineering research for the development of prosthetic and orthotic devices.

31. THAT, after needs have been established by the regional councils, additional resources be made available to expand special vocational and educational programmes, for example, industrial rehabilitation units and sheltered workshops for adults, and

innovative programmes for sensory deprived children.

32. THAT appropriate rehabilitation programmes, aimed at activation, be made available to all chronic hospitals, geriatric units, nursing homes and homes for the aged.

33. THAT comprehensive home care programmes be extended across the province as quickly as possible and that the programmes be broadened to include all rehabilitation services needed.

34. THAT one of the resources developed in each district be centres to deal with individual or family crisis situations, and that they be operated on a 24-hours-a-day, 7-days-a-week basis. Depending on the local situation, they should be established in a facility such as the local welfare department, the local health department, or in the hospital social service department.

35. THAT a co-ordinating office be developed in each district to provide information on health, educational, vocational, and social rehabilitation programmes available, and to give assistance to both the providers and consumers of care in the co-ordination of these services and in the solving of day-to-day problems.

36. THAT further study be done on the roles and functions of a "rehabilitation team" and on factors in the educational system which could contribute to the team concept of health care delivery.

37. THAT, in the field of rehabilitation care, greater emphasis be given to research on the effectiveness of present programmes and systems of delivery.

38. THAT health curricula in all elementary and secondary schools include important aspects of health and social well-being in present-day Ontario.

39. THAT health education of the public be promoted by the Province, with special emphasis on the prevention of chronic diseases and accidents.

40. THAT public health and social service agencies ensure that family planning services and genetic counselling services be made readily available to people in need of these.

41. THAT the Province ensure that, in each area, prenatal, obstetrical, and neonatal advice and services of a high standard are provided.

42. THAT local health units promote the development of accident prevention programmes at local level.

43. THAT local health units provide an occupational health service to industries which are unable to support their own service due to their size.

44. THAT the Ontario Department of Health, through the local health units, make available and promote the use of all appropriate vaccines known to prevent disabling infectious diseases.

45. THAT each region ensure that adequate services are available for the assessment and counselling of children of pre-school and school ages, who require these services.

46. THAT recommendations 87, 91 and 113 of the Report of the Provincial Committee on Aims and Objectives of Education in the Schools of Ontario, 1968, regarding Special Learning Situations be adopted and implemented by the Government of Ontario.

47. THAT local public health and social service departments co-ordinate their geriatric services to provide both medical and social aspects of care through the establishment of a geriatric clinic with associated community services in at least one hospital in each district.

Report of the Sub-committee on Rehabilitation Services

SECTION I

Introduction

TERMS OF REFERENCE

The Sub-committee on Rehabilitation Services was set up as a Sub-committee of the Committee on Health Care Delivery Systems. It was given broad terms of reference to develop proposals relating to rehabilitation services in Ontario.

METHOD OF COMMITTEE INVESTIGATIONS

Early in the Sub-committee's deliberations, it was agreed that rehabilitation should be defined as "A process of enabling the person to reach or regain his maximum potential." It was also agreed that this process would encompass health, educational, vocational, and social aspects and that mental illness, mental retardation, and the related disabilities should be included as an integral part of the total programme.

In proceeding with its task, the Sub-committee reviewed the literature in the field of rehabilitation, examined the work of other committees and commissions, and obtained advice from colleagues with expertise in various aspects of the rehabilitation process. The Sub-committee also studied the practices of government departments and other agencies involved in providing rehabilitation care. The members examined the need for rehabilitation services, and defined the problem areas in the organizational structure through which care is delivered, and in the methods of financing. They also examined the services themselves, to assess deficiencies in type, quality, and

quantity of service. They examined alternative solutions, and prepared recommendations concerning the development of a future system, recognizing the need to make the best possible use of the limited resources of manpower, facilities, and funds.

Throughout their deliberations, the Sub-committee kept in mind the goal of developing an organizational structure and a comprehensive range of services which would provide the best possible rehabilitation care to the people of Ontario.

OUTLINE OF THE RECOMMENDATIONS

In the report, Recommendations 1 to 3 provide the basic principles or philosophy for the development of an effective rehabilitation system. The acceptance of these three principles by the Government of Ontario is a necessary prerequisite to all subsequent recommendations.

Recommendations 4 to 17 are seen as required steps in the implementation of this approach to rehabilitation. The action recommended in these would, in the Sub-committee's opinion, provide the administrative and financial framework within which rehabilitation care could be effectively delivered to the people of Ontario.

Recommendations 18 to 34 contain the views of the Sub-committee on the services required for the provision of rehabilitation at the various levels within this administrative and financial framework.

One specific recommendation – No. 35 – has been made concerning the establishment of co-ordinating information offices. The lack of these is felt to be one of the major gaps in the present system. Insofar as education and research are concerned, the Sub-committee, in Recommendations 36 and 37, has supported a number of recommendations made by the Committee on Education of the Health Disciplines of the Ontario Council of Health.

The Sub-committee has recognized the ultimate aim of prevention rather than treatment or rehabilitation, and has concluded the report with a number of recommendations (Nos. 38 to 47) in this area. It is realized that an abundance of hard data to support these recommendations may be lacking and that further study is needed on methods of influencing attitudes and of involving the public in the prevention of disabling conditions. It is felt, however, that there is sufficient information and experience to justify these recommendations.

SECTION II

Comments and Recommendations

The system for the delivery of rehabilitation services can be studied as a classical example of major problems preventing adequate development of a comprehensive health care delivery system. By its very nature, an all-encompassing programme requiring governmental, voluntary agency, and total community participation, will have shortcomings of varying degrees. Rehabilitation or habilitation, as the case may be, of an adult in his community or a child in his family, is such a programme.

This section of the report presents comments and recommendations on the value and scope of rehabilitation services, and on the system by which rehabilitation services are delivered. In the system of delivery, the two key problems are: (i) the lack of an integrated organizational structure to enable effective planning and co-ordination among the various agencies providing service so that better use can be made of existing resources, and (ii) inadequacies and inefficiencies in the services themselves and in other components of the system.

A. VALUE OF REHABILITATION

An appreciation of the value of rehabilitation is basic to the development of an adequate organizational structure and of appropriate services. In the past, much emphasis has been placed on the economic aspects of rehabilitation, while too little emphasis has been

placed on humane values. For example, programmes such as that of the Workmen's Compensation Board have been developed to provide rehabilitation services to the injured workmen. In addition, to qualify under the terms of the Federal Vocational Rehabilitation Services Act, the individual must have a potential for gainful employment. Humane aspects must receive increasing emphasis in the future. Those who will never be competitively employable can benefit physically and psychologically from rehabilitation, and should not be neglected. They too, whether young or old, and whether in long-term institutions or at home, are entitled to a balanced and well-rounded way of life.

RECOMMENDATION 1
THAT the Government of Ontario place new emphasis on the planned provision of comprehensive rehabilitation programmes, recognizing the rights of all residents of Ontario to achieve their maximum capacity for living, regardless of their economic potential.

B. SCOPE OF REHABILITATION

Traditionally, the scope of rehabilitation has been defined too narrowly. Disabilities can affect people medically, psychologically, and socially and there can be academic and vocational training implications. These aspects – health, educational, vocational, and social – must be included in the development of comprehensive rehabilitation programmes; they must be integrated into a co-ordinated and continuous process.

In the past, locomotor and neurological disorders have been the areas of prime concern to the specialist in rehabilitation medicine. More attention should be paid to the needs of patients with continuing disabilities due, for example, to arteriosclerotic and rheumatic heart disease, pulmonary disease, diabetes, visual problems, and to those where the disability may be psychological and social more than physical.

The following definitions of the World Health Organization provide a useful frame of reference:

Medical rehabilitation – The process of medical care aiming at

developing the functional and psychological abilities of the individual, and, if necessary, his compensatory mechanisms, so as to enable him to attain self-dependence and lead an active life.

Social rehabilitation – That part of the rehabilitation process aimed at the integration or reintegration of a disabled person into society by helping him to adjust to the demands of family, community, and occupation, while reducing any economic and social burdens that may impede the total rehabilitation process.

Vocational rehabilitation – The provision of those vocational services, e.g., vocational guidance, vocational training and selective placement, designed to enable a disabled person to secure and retain suitable employment. *

RECOMMENDATION 2
THAT comprehensive rehabilitation programmes be organized so as to effectively include health, educational, vocational, and social aspects.

RECOMMENDATION 3
THAT the health aspects of comprehensive rehabilitation programmes be organized so as to effectively include physical, mental, psychological, and social components.

C. ORGANIZATIONAL STRUCTURE OF THE REHABILITATION DELIVERY SYSTEM

The preceeding three recommendations present the philosophy underlying the development of an effective rehabilitation delivery system. The recommendations which follow are based on the acceptance of this philosophy.

1. The Programme Concept

The breadth of scope of the rehabilitation process has impeded the development of a comprehensive and integrated system for the delivery of rehabilitation services. In the past, no system has existed

* World Health Organization Technical Report Series No. 419, WHO Expert Committee on Medical Rehabilitation, Second Report, Geneva, 1969, p. 6.

to provide a framework in the context of which needs could be considered. A multiplicity of public and voluntary organizations and agencies have developed services to meet specific needs, without sufficient study of the effect each development might have on the overall pattern. This has resulted in unnecessary duplication in some areas, gaps in others, and organizational fragmentation which has led to a lack of continuity in patient care, inefficient use of manpower and physical resources, and rising costs.

Some of these problems could be solved by adopting the "Programme Concept" as a basis for planning. In planning the delivery of rehabilitation service, two components may be considered – the programme and the resources required for the programme. A programme in this context may be defined as a planned operation designed to use effectively and selectively those resources necessary to enable a group of patients to achieve maximum rehabilitation. In general, this group of patients would have certain characteristics in common and the resulting programme would probably require certain resources with a high degree of frequency.

An example would be a spinal cord injury programme. The resources required would include an in-hospital bed facility; many of the health-related professions, including nurses, physiotherapists, occupational therapists, psychologists, social workers; physicians, including physiatrist, neurologist, urologist, and possibly psychiatrist; orthotic appliances; pre-vocational and educational assessment; re-education, either academic or vocational; vocational counselling; transportation; and possibly home care.

Rehabilitation required for an adolescent psychiatric programme could be considered as another example. The resources required would probably include some in-patient beds; hostel facilities; a grouping of the health-related professions to include the social worker, psychologist, occupational therapist, and nurse; certain physicians, particularly a psychiatrist with occasional consultants in neurology, medicine, and clinical pharmacology; pre-vocational and educational assessment, re-education, either academic or vocational, vocational counselling and day care facilities. Other rehabilitation programmes as, for example, chronic arthritis, minimal-brain-damaged children, mental retardation, chronic respiratory disease, would also require many of the same resources and facilities.

In the past, individual hospitals or agencies developed programmes in response to a particular need and then proceeded to acquire the

specific resources for that programme. As has been indicated, this inevitably led to unnecessary duplication in some areas and gaps in other areas in the delivery of rehabilitation services.

In planning services on the basis of the "Programme Concept," it would be possible to identify the major programme priorities and then the resources which are essential to meet those programme needs. These resources could be shared and deployed to operate the various programmes. In such a programme approach, the pre-vocational workshop and its highly specialized staff, transportation, educational facilities and certain of the professional staff could be used in a flexible and efficient manner to service all the programmes.

If subsequent developments were to show a declining need for a particular programme, resources could be effectively redeployed into other existing programmes or to develop new programmes in areas of new needs.

Inherent in this concept would be a planned programme budgeting system so that the most effective use of funds and resources (both people and facilities) could be planned year by year and on a flexible basis to respond to the community's needs.

> *RECOMMENDATION 4*
> *THAT the system for the provision of rehabilitation be developed on the basis of the "Programme Concept" (rather than on the traditional hospital, agency, or disease basis).*

2. Provincial Organization and Financing

The broad scope of rehabilitation has created difficulties in achieving co-ordination in the planning and provision of care.

At the provincial level, responsibility for rehabilitation is divided among various divisions of the Department of Health, the Ontario Hospital Services Commission, the Departments of Education, Labour, and Social and Family Services, and the Workmen's Compensation Board. This fragmentation is inevitably reflected at the delivery level, in delays and in serious lack of continuity in service. While each of these Departments must bear some responsibility for effective co-ordination, prime responsibility must rest with the Department of Health and its agencies, since conditions which necessitate rehabilitation begin most frequently with health

and related problems.

Difficulties exist in integrating private agencies into the overall rehabilitation system. These agencies often were developed in the past to meet the needs of special disability groups which were being ignored by official agencies. Their development has contributed to the problems of fragmentation of service, gaps and overlaps, and inefficient use of facilities and personnel. Often, agencies meet their own objectives well, but these may conflict with the objectives of the community as a whole.

These differences must be subject to increasing scrutiny as more and more government monies are funneled into these agencies. The operations of the Workmen's Compensation Board is a good example of this type of problem, even though it is not a private organization. It meets its own objectives well but the services are restricted to the workman injured on the job. The movement of this segment of the population to Toronto for treatment may impede the development of comprehensive regional programmes and may not be in the best interests of the patient and his family.

Interrelated with the organizational problems are those created by divergent arrangements for financing various aspects of rehabilitation. These different methods tend to inhibit the free flow of patients among organizations providing rehabilitation services and create complications in achieving a continuum of care. Hospital services are financed through the Ontario Hospital Services Commission. Hospital funding stresses in-patient care, and when allowances for out-patient visits are inadequate to meet real costs, a situation exists in which budgeting objectives are opposed to programme objectives. This leads to unnecessary use of in-patient facilities.

Care for the mentally ill in provincial hospitals and in halfway houses is paid for by the Department of Health; vocational rehabilitation is the responsibility of the Department of Social and Family Services; and the Department of Education is involved in financing educational aspects. In each of these, rehabilitation has to compete with other departmental programmes for funds and is subject to different value judgements when priorities are established. In addition, there has been a general tendency to concentrate on and fund specific disability groups, often through the efforts of voluntary agencies, while others have been neglected (for example, the support for poliomyelitis and mental retardation, as opposed to the mentally ill).

Recognizing the need for improved co-ordination of rehabilitation programmes at the provincial level among the Departments of Education, Labour, Health, and Social and Family Services, and the Ontario Hospital Services Commission, the following recommendations are made:

RECOMMENDATION 5
THAT a Director of Rehabilitation be appointed to the staff of the Department of Health. He would be of executive director status; he would co-ordinate the rehabilitation activities of the various departments and agencies of the Provincial Government and assist the regional rehabilitation committees in carrying out their functions. He would not be responsible for programme administration.*

RECOMMENDATION 6
THAT the Director of Rehabilitation be assisted in performing his role by a committee of expert representatives from the Departments of Education, Labour, Health, and Social and Family Services, and the Ontario Hospital Services Commission.

RECOMMENDATION 7
*THAT financial arrangements be instituted for the funding of rehabilitation services on the basis of the "Programme Concept" rather than on the present basis.***

RECOMMENDATION 8
THAT the effectiveness of rehabilitation services operated by both public and private agencies be analysed and that the results of these analyses be considered in the continued government funding of these rehabilitation services.

3. A System of Regional Organization

Too little opportunity exists for responsible local participation in planning for new rehabilitation programmes and in making

* See Recommendation 12.

** It is recognized that programmes might continue to be funded through a variety of channels.

adaptations to local conditions within provincial guidelines. In addition, there is too little co-ordination of operational activities and insufficient co-operation among the organizations providing rehabilitation services at the level of delivery.

A solution to the problems of planning, operational co-ordination, and financing could be found in the development of a regional system for the delivery of rehabilitation services within the programme of regional organization of all health services. A three-tiered structure is envisaged, as recommended by the Committee on Regional Organization of Health Services to the Ontario Council of Health, in January 1969. The organizational structure should be sufficiently flexible to allow for the variations which exist from region to region in the province, and to permit change in the light of experience and as priorities alter.

There should be a restructuring of responsibilities and authority to permit planning and operational co-ordination at the appropriate level. Public and voluntary private agencies should be integrated into the overall system; consultation with both types of agency in the planning process is essential.

Regional health councils should establish regional and district rehabilitation councils. These should be of manageable size and should comprise experts in the field of rehabilitation, community representatives, and others considered appropriate by the regional health council. Each regional and district rehabilitation council should be responsible to the appropriate regional or district health council. Rehabilitation councils should be assisted in performing their functions by suitable professional and technical staff of these health councils.

RECOMMENDATION 9
*THAT a regional system for the delivery of rehabilitation services be developed within the framework of the regional organization of total health services.**

RECOMMENDATION 10
THAT rehabilitation committees be established at the regional and district levels to perform the functions outlined in Recommendations 12 and 13.

* Development of the system of regional organization for rehabilitation services should not be delayed pending the development of the regional organization of total health services.

RECOMMENDATION 11
THAT, at the provincial level, the following functions be performed within a regional system for the delivery of rehabilitation care:

(a) overall planning and co-ordination of rehabilitation programmes, and the setting of provincial goals, standards, and policies for the deployment and financing of such programmes.

(b) establishing provincial priorities.

(c) interpreting provincial policy, and providing guidance, advice, information, and direction to the regional level.

(d) instituting appropriate controls.

(e) collecting data and evaluating the effectiveness of the system.

(f) collecting data and disseminating information on the functions, staffing, and design of rehabilitation facilities.

RECOMMENDATION 12
THAT regional rehabilitation committees perform the following functions in a regional system for the delivery of rehabilitation care, as part of regional health councils and within provincial policy, standards, and guidelines:

(a) defining regional goals and objectives, based on the characteristics of the region and taking cognizance of the objectives of the individual districts within the region.

(b) developing plans on a district and regional basis for the provision of programmes to meet these objectives.

(c) co-ordinating programmes and identifying programme needs.

(d) setting priorities.

(e) identifying the resources of finances, facilities, agencies and manpower, defining roles within rehabilitation programmes of public and voluntary agencies, and deploying resources including manpower so that these programme needs may be met, and so that operational co-ordination will be possible.

(f) ensuring that information about available rehabilitation programmes is provided.

(g) overseeing the effective operation of the rehabilitation system within the region.

RECOMMENDATION 13
THAT district rehabilitation committees perform the following functions in a regional system for the delivery of rehabilitation care, as part of district health councils and within the framework of provincial policy and the regional planning programme:

(a) participating with the regional rehabilitation council in defining district needs and objectives.

(b) consulting with the providers and consumers of health care in the district planning rehabilitation programmes.

(c) co-ordinating the efforts of those organizations providing rehabilitation programmes to ensure the effective use of resources in meeting district priorities.

(d) acting as the link between the individual patient and any other level in the rehabilitation system, particularly when any problem arises.

4. Information for Planning and Evaluation

Adequate information is essential if sufficient personnel is to be trained and comprehensive service programmes planned. Information

is required on the numbers of people affected by handicapping conditions,* on the type of condition responsible for disability and the need for rehabilitation services by these people with chronic disabilities, and by those in post-acute phase of illness. Often, insufficient data are obtained and the programmes and facilities provided do not meet the most urgent needs of the disabled persons concerned. Not only the volume of services provided, but also the specific needs for service must be documented.

No accurate information is available for Ontario on the number of persons with handicapping conditions, or on the need for rehabilitation services by those with activity limited by chronic disease or by the post-acute phase of other diseases. An estimate of the number of persons has been made, based on the U.S. National Health Survey of 1963 to 1965 and the Canadian Sickness Survey of 1950-1951, shown in Appendix A. This indicates that there may be 900,000 persons in Ontario with limitation of activity due to chronic disease. Of these, about 490,000 may have major limitation of the usual activity, while 164,000 may be unable to carry on the major activity of their age group.

RECOMMENDATION 14
THAT resources be made available for properly designed epidemiological and statistical studies to determine the incidence and prevalence of handicapping conditions so that rehabilitation programmes may be effectively planned and evaluated.

RECOMMENDATION 15
THAT registers of certain handicapping conditions be established and present registries extended to form the basis for statistical studies as well as to assist in the provision of continuing care.

5. Problems in Age Group Boundaries

In the discussion so far, comments and recommendations have been related primarily to the broad organizational structure through which

* The main broad causes of handicapping conditions are considered to be:
1. Congenital and developmental
2. Acquired – traumatic
   – disease process – progressive
   – nonprogressive
   – neoplastic
3. Psycho-social.

rehabilitation services are delivered and to the inter-relationships within the structure. One specific problem at the delivery level must also be mentioned, since it has a major effect on co-ordination in the provision of services. This relates to the age of the patient. Too often, programmes are limited to specific age groups by provincial legislation and regulation or because of specific practices of an individual agency. Frequently, programmes for children suffering from severe physical disabilities are terminated when the child reaches 18, that is, at the point where he or she needs the most help establishing a meaningful way of life. In addition, vocational services are not available to those under 18 even though the vocational phase of the rehabilitation process should be brought into play before the patient reaches 18.

It is recognized that it is administratively convenient to make a division into age groups. The problems encountered, the goals aimed at, and the programmes and facilities required are different for different ages. It is vital that the boundaries be flexible, however, to enable those who do not fall within the age guidelines to benefit from a specific programme usually directed to one age group. In instances where there is dispute on the programme from which the patient would receive most benefit, an assessment team established by the regional council should be empowered to make the final decision on patient placement.

The review related to age groupings is attached as Appendix B to this report. Three major groupings are suggested, along with four sub-groups, and are included here as guidelines:

1.	Youth	0-18	:	0-13
				14-18
2.	Adult	19-64	:	19-45
			:	46-64
3.	Geriatric	65 and over		

RECOMMENDATION 16
THAT the division of the recipients of rehabilitation services into age groupings be recognized as useful for administrative convenience only, and that the boundaries of the age groupings be flexible to permit actual patient needs to be met.

RECOMMENDATION 17
THAT, in instances of doubt, the final decision

concerning the care of a patient in facilities and programmes not designed primarily for his age group be left to a multi-disciplinary screening team at the regional level.

D. COMPONENTS OF THE REHABILITATION DELIVERY SYSTEM

1. Rehabilitation Treatment Services

(a) Rehabilitation Treatment Programmes and Centres

Because of the divided responsibility for different rehabilitation programmes and the numerous agencies providing services for different groups of the population, there are serious gaps in services available and also inefficient use of facilities and personnel. Rather than a range of services being available to the patient through a single structure, a number of agencies may have to be used for a single patient. Continuity of care is made more difficult by this fragmented structure. Some services such as physiotherapy are primarily organized for hospital patients, and others, such as vocational retraining, are more closely associated with welfare services.

A comprehensive range of programmes for health, educational, vocational, and social rehabilitation should be readily available at all times for each person needing rehabilitation. The rehabilitation services available must be restructured with a team concept to provide this range. With a number of specialized staff expert in the different aspects of rehabilitation care being involved, the total needs of the patient may be met. Persons on such a team should include physicians, physiotherapists, occupational therapists, social workers and vocational counsellors, with experts in other fields such as appropriate medical specialists, speech therapists, prosthetists, etc., being available for the needs of particular patients.

The rehabilitation of those who are mentally ill, as well as those with special problems such as mental retardation, drug addiction, alcoholism, etc., has continued to be not only disability orientated, but also carried on in completely separate facilities and with separate personnel. The rehabilitation services

for those who are mentally ill as well as those with special problems should be integrated with the general rehabilitation services. As well as preventing costly duplication of staff and facilities, this would provide psychiatric services for those whose primary reason for rehabilitation is physical disease. On each rehabilitation team, or available to it, there should be psychiatrists, clinical psychologists, and other persons skilled in the assessment and treatment of the mentally ill.

As the Ontario Hospital Services Commission is presently encouraging, there should be a regional rehabilitation centre in each region in the province. These centres should be designed to deal primarily with the more complex rehabilitation problems within the region. Each should have an independent regional identity and should be associated with the university health sciences centre where available and be in juxtaposition to an active treatment hospital. In this way the staff and resources of each could be used to facilitate educational and research programmes. Isolation from these resources would result in the centre being isolated from the general practice of medicine. The regional centre should have in-patient hospital beds only for those patients who require skilled medical or nursing care; for most patients the major stress must be on ambulatory care.

There should be hostel accommodation with self care services for those patients whose home is distant from the regional centre, and well organized out-patient services for those living nearby. An organized transportation service to the rehabilitation centre would enable patients whose activities are severely limited to be assessed or treated on an out-patient basis rather than being admitted to costly hospital accommodation. The Sub-committee on Rehabilitation Services is in full agreement with Recommendations 55, 56 and 57 of the Sub-committee on Highly Specialized Services concerning the provision of hostel services and transportation services.

Not all patients who need rehabilitation services need to be assessed or treated at the regional rehabilitation centres. Most patients have less complex problems which can be resolved at facilities in the local area in the general or convalescent hospitals. It is important that assessment of need for rehabilitation services begin early in the illness, and that continuity of care from in-patient to out-patient services be maintained. The rehabilitation services of these hospitals must follow the same principles as

the regional centres, with a full range of services and staff appropriate to their needs. There should be close co-operation, so that the services provided in the large general hospitals and in the regional rehabilitation centres are complementary.

A district rehabilitation centre may be appropriate in some areas of the province where the population warrants it. This would prevent the costly duplication of staff and services in the general hospitals in that district, and the need to refer patients to a distant regional rehabilitation centre for assessment or treatment.

RECOMMENDATION 18
THAT a comprehensive range of rehabilitation programmes be developed within each region and that the team concept be emphasized so that a continuum of care can be provided for all patients requiring health, educational, vocational, and social rehabilitation, from first contact with the system until maximum potential is reached.

RECOMMENDATION 19
THAT a regional rehabilitation centre for both in-patients and out-patients be developed in each region.

RECOMMENDATION 20
THAT each regional centre have an independent regional identity, be associated with the university health sciences centre where available, and be in juxtaposition to an active treatment general hospital.

RECOMMENDATION 21
THAT other general hospitals provide as full a range of rehabilitation services as is required for the needs of an active treatment hospital, and that the rehabilitation services provided by them be complementary to those of the regional rehabilitation centres.

RECOMMENDATION 22
THAT, where justified by district needs, district rehabilitation programmes or centres be established, with the services provided being complementary to those of the regional rehabilitation centres.

RECOMMENDATION 23
THAT hostel accommodation be provided in association with the rehabilitation centres and that the funding of hostels be the responsibility of the Province.

RECOMMENDATION 24
THAT transportation services be made available by rehabilitation centres for patients involved in rehabilitation programmes, where warranted by the patient's condition and authorized by the centre, and that such services be paid for by the Province.

(b) **Case Finding and Referral for Assessment**

At present, very little effort is being made to seek out those persons who need rehabilitation services. One source of such active case finding should be the local health units, through the school health programme, the home care programme, or other existing programmes. The local health unit should then have access to the rehabilitation services so that the patients can be referred directly for assessment of their needs. Similarly, methods of referral should be available to groups or agencies concerned with the health or welfare of the general public as well as private physicians. This would allow, for example, referral for assessment of the need for rehabilitation services where the primary reason for contact with the system had been not a health need but a welfare need.

RECOMMENDATION 25
THAT rehabilitation services accept referrals from public and private agencies concerned with health or social services for assessment of a patient's needs as well as from private physicians.

(c) **Patient Assessment**

Multi-discipline assessment teams are needed in each region to provide aid in the assessment of the health, educational, and vocational rehabilitation needs of the patients. These teams need not be directly involved in specific diagnosis and treatment but should act primarily as a screening team. Patients seen by them could be referred to the local services or, for those with more complex problems, to the district or regional rehabilitation

centre. The teams should be prepared to visit nearby towns, particularly in areas of the province where transportation of the patient to the regional or district centre may be difficult. These teams should not be standing bodies but should be set up to meet specific needs which may arise in an individual patient. The team should include any discipline appropriate to these needs, whether a physician, psychiatrist, physiotherapist, vocational counsellor, etc., with one member acting as co-ordinator. Other, more specialized disciplines, such as physiatrist, prosthetist, etc., should be available within the region or district to aid in assessment. These assessment teams should operate under the direction of the district or regional rehabilitation centre.

RECOMMENDATION 26
THAT multi-discipline assessment teams be established as needed by regional or district rehabilitation committees and that the composition of these teams be determined by individual patient needs.

(d) Prosthetic and Orthotic Services

One of the urgent needs in the present rehabilitation services available is for the provision to the patient of artificial limbs, braces and other technical aids prescribed by the physician. Apart from patients whose medical services are paid for by the Workmen's Compensation Board or the Department of Veterans' Affairs, provision for their payment is only made available for patients who are being rehabilitated to employment, through the Rehabilitation Branch of the Department of Social and Family Services. For others, such as children or retired persons, these can only be obtained through volunteer agencies such as the Ontario Society for Crippled Children or the Rehabilitation Foundation for the Disabled. Payment for prosthetic or orthotic appliances prescribed by a physician and needed by the patient for his functional rehabilitation should be available equally to all citizens of Ontario under the Ontario Health Services Insurance Plan.

These appliances are at present supplied by or manufactured by a few private or hospital appliance centres. There is a lack of information available to the practising physician, particularly outside the major centres, of equipment available within the province, and also of the new techniques and equipment being made both within the province and elsewhere. The regional

rehabilitation centres should act as a referral centre for the physicians in their area to provide information as to services and equipment available. The basic prosthetic and orthotic services should be available from each regional centre. The more complex appliances should be available in the larger regions for patients within these areas or from other areas on referral.

During the preparation of this report, the Sub-committee learned of a report by the Advisory Committee on Prosthetic and Orthotic Services, Ontario Department of Health, which was formed in July 1968. This is attached as Appendix C. It would seem desirable that further study related to the steps necessary for implementation should be considered.

RECOMMENDATION 27
THAT provincial benefits be extended to include prosthetic and orthotic appliances and devices prescribed by a physician for a patient's rehabilitation.

RECOMMENDATION 28
THAT the regional rehabilitation centres act as referral centres for their region in providing information as to prosthetic and orthotic services available.

RECOMMENDATION 29
THAT the regional rehabilitation centres determine the need for prosthetic and orthotic services and establish facilities for these services where the need is not being met.

RECOMMENDATION 30
THAT the Province continue to support biomedical engineering research for the development of prosthetic and orthotic devices.

(e) Vocational and Educational Programmes

In certain age groups, vocational rehabilitation is an important part of the total rehabilitation. However, although full employment may be an end result of the rehabilitation process, it is only one of many and must not be regarded as the primary goal. Even employment may be more important for its social significance, for example keeping the individual out of an institution, than for its economic results. Vocational, educational, and social services

are part of the comprehensive rehabilitation programme. Their importance for any individual depends upon many factors including the patient's age and type of disability.

For adults, the goal for vocational rehabilitation is to achieve the maximal work potential. This may be retraining to return to the previous occupation, or retraining to a new occupation more compatible with the degree of disability. The retraining must also be consistent with the ability to find employment; many disabled individuals who have participated in extensive programmes of vocational rehabilitation have been unable to secure employment in the community. This has been the result of inappropriate training, inadequate placement services, or a negative attitude on the part of employers, particularly for certain disabilities such as epilepsy.

As well as work education programmes, more industrial workshop programmes are needed in the province, where assessment of work capacity or work training and conditioning can be done. Some persons will not be capable of being trained to enter or return to the work force; for them a more extensive system of sheltered workshops throughout the province is required. The individual workshop programmes and sheltered workshops should be organized to deal with any disability. There should not be separate programmes for single diseases, or separate programmes for physical and mental diseases.

For children and adolescents, the major stress must be on education, which should be designed to aim at the person's maximum educational potential rather than merely to fit him into the work force. For the sensory deprived child - blind, deaf, retarded, or multi-handicapped – innovative programmes are needed so that education to useful living at the child's maximum may be developed.

RECOMMENDATION 31

THAT, after needs have been established by the regional councils, additional resources be made available to expand special vocational and educational programmes, for example, industrial rehabilitation units and sheltered workshops for adults, and innovative programmes for sensory deprived children.

(f) Activation Programmes

The goal of rehabilitation is not necessarily employment, but there is a strong emphasis on this aspect of programming. There are many disabled persons who are not and never will be competitively employable, and yet they too are entitled to a balanced and well-rounded way of life. Many of them are in nursing homes or homes for special care, with little or no programming other than the T.V. set. Residential facilities with a home atmosphere, and activation, not nursing care, as a philosophy, are necessary, as are the provision of aids (dental, optical and physical) and of social services.

For humanitarian as well as economic reasons, rehabilitation services should be present in or made available to all chronic hospitals, geriatric units, nursing homes and homes for the aged, in order that all patients will be able to maintain the maximum level of function each is able to reach. The potential that they can reach may not be great, but simply increasing the patient's ability to leave the bed or to walk or eat unaided will decrease dependancy and the level of nursing care required. To encourage participation in these programmes, the residents of the hospitals or homes should be actively involved in the development and organization of the activation programmes.

RECOMMENDATION 32
THAT appropriate rehabilitation programmes, aimed at activation, be made available to all chronic hospitals, geriatric units, nursing homes and homes for the aged.

(g) Home Care Programmes

In the past, insufficient emphasis has been placed on the value of home and family as a basic resource in rehabilitation programmes, offering economic advantages as well as improved care for the patient. The present home care programme is limited both in the areas of the province covered and also in the scope of services available. Rather than a means of achieving the maximum in patient care, it tends to be only a programme of nursing care, often designed more for the advantage of the institution, in allowing for early hospital discharge, than for the advantage of the patient. Rehabilitation of the patient must be a continuing process, and some patients, unable to return frequently to a

rehabilitation centre, can have their rehabilitation programme carried out in the home. To make this possible, the scope of the home care programme must be widened to include physiotherapy and any other rehabilitation service needed by the patient. The home itself, as well as the home situation, should be assessed so that any needed alterations may be made which could contribute to increased activity of the handicapped patient. A comprehensive home care programme should be extended throughout the province, rather than the limited programme in limited areas which now exists.

RECOMMENDATION 33
THAT comprehensive home care programmes be extended across the province as quickly as possible and that the programmes be broadened to include all rehabilitation services needed.

(h) Social Rehabilitation – The "Crisis Centre"

Social rehabilitation is equally as important as other forms of rehabilitation. Many social problems, however, are not medical problems and are handled outside the health care system. Even more than in the health care system, it is often difficult to establish a method of entry into a social rehabilitation programme. One particular situation where this occurs is when the social problem arises as an emergency. Although emergency centres for medical problems are widespread, there are almost no emergency centres for social problems. A centre where the immediate crisis, whether individual or family, could be met, could be the beginning point in social rehabilitation. Such centres, staffed by a social worker, should be established and, since the immediate social problem could occur at any time, should be open on an emergency basis, 24 hours a day and seven days a week. Since some of these problems may be related to a medical emergency, these centres could be related to a hospital social service department. In some areas of the province, however, they should be related to the presently available social services located in the local health or welfare department.

RECOMMENDATION 34
THAT one of the resources developed in each district be centres to deal with individual or family crisis situations, and that they be operated on a 24-hours-a-day, 7-days-a-week basis. Depending on the local

situation, they should be established in a facility such as the local welfare department, the local health department, or in the hospital social service department.

2. Information Services

There is a constant lack of comprehensive information from one source on what is available in a community for the patient who requires special help in his rehabilitation programme. Many physicians wish to carry forward a programme for their patients but are unable to get anything more than fragmentary help. Full and comprehensive information should be collected for each community or district on the health, educational, vocational, and social rehabilitation services which are available at the present time. A printed manual of services should be produced, outlining the types of service, the patients to whom they are available, and the persons or places to contact to refer a patient to these services. This manual should be distributed to all practising physicians and other organizations or agencies within the community or district concerned with the health of the general public.

RECOMMENDATION 35
THAT a co-ordinating office be developed in each district to provide information on health, educational, vocational, and social rehabilitation programmes available, and to give assistance to both the providers and consumers of care in the co-ordination of these services and in the solving of day-to-day problems.

3. Educational and Research

Responsibility for some of the problems in a co-ordinated delivery of services rests with the persons who provide these services. Each profession, in the process of educating and training its members, has not only given them special skills but has also influenced them into thinking and working according to that profession's values and attitudes. Some of these values and attitudes prevent the development of the type of close collaborative teamwork that is necessary for effective rehabilitation services.

The interrelationships between members of a health team are complex when the patient has a chronic illness requiring long-term

rehabilitation care. During this time, changes and shifts are required in the roles being played by team members. These problems have been considered by the Committee on Education of the Health Disciplines and, in the report to the Ontario Council of Health in June 1969, Recommendation 6 states: *THAT the word "team" (as used in "health team," "nursing team," "rehabilitation care team," etc.) be examined and clarified as to its meaning and use when applied to groups of health care personnel.*

This Committee also recommended further study of the educational programmes; Recommendation 7 states: *THAT academic institutions, and other educational institutions for education and training of the health disciplines, be given government support beyond normal operating expenses both for ongoing evaluation of their educational programmes and for the necessary resources required to institute those desirable changes indicated by such evaluation.* As part of this evaluation, studies should be made of the factors in the educational system which could contribute to effective roles in a team structure.

Although biomedical research has been done on the diseases which cause chronic disabilities, there has been little study done on the effectiveness of treatment. Some studies that have been done have contributed to the inequalities in the rehabilitation system, since they have been based on the economic results of return to work. There has been little evaluation of the effectiveness of present programmes in other terms, as well as little evaluation of the needs for rehabilitation services. Studies in the prevalence of handicapping diseases are required so that rehabilitation services can be directed towards these needs.

Rather than effectiveness of the different methods of treatment, emphasis must be put on the effectiveness of the system of rehabilitation care in the province. Evaluation of the present programmes in meeting the needs of the province should be carried out so that the areas in which they need strengthening can be identified. It is only by such studies of rehabilitation need, rehabilitation care, and rehabilitation programmes, that the needs of the province in this field can be met.

RECOMMENDATION 36
THAT further study be done on the roles and functions of a "rehabilitation team" and on factors in the educational system which could contribute to the

team concept of health care delivery.

RECOMMENDATION 37
THAT, in the field of rehabilitation care, greater emphasis be given to research on the effectiveness of present programmes and systems of delivery.

4. Primary Prevention

*Preventive measures (primary prevention) have never required any justification, as prevention is a self-evident basic general objective of health services. However, a more recent motivation to develop services for prevention has been the recognition that mounting costs of treatment, and public demand for it, make the very credibility of treatment services depend on the maximum effort being expended on prevention!**

The method by which the great scourge of our age, poliomyelitis, was conquered by the use of Salk and Sabin vaccines emphasizes the importance of finding ways to prevent handicapping conditions which can result in the need for costly rehabilitation services.

(a) Health Education

In the Federal Task Force Report on the Cost of Health Services in Canada, 1969, it was stated: *If, by education, individuals can be motivated to take advantage of the services offered or adapt their way of life to healthful living, then in the long run this will have an effect on the cost of treatment services.*

This philosophy is worthy of emphasis; to accomplish this, it is necessary that children be instructed in positive health as an integral part of their school education and, because of the increasing incidence of chronic diseases and accidents (at home, work and play), it is advisable that the general public be well informed on their prevention.

RECOMMENDATION 38
THAT health curricula in all elementary and secondary schools include important aspects of health and social well-being in present-day Ontario.

* Brotherson, J. H. F. and G. D. Forwell. "Planning of Health Services and the Health Team," *The Theory and Practice of Public Health*, Third Edition, 1969.

RECOMMENDATION 39
THAT health education of the public be promoted by the Province, with special emphasis on the prevention of chronic diseases and accidents.

(b) **Family Planning, Genetic Counselling, Prenatal, Obstetrical and Neonatal Services**

It is obvious that avoidance of the birth of unwanted and malformed babies would greatly reduce the numbers of handicapped children in Ontario who would require rehabilitation services.*

A large number of conditions that lead to mental retardation, e.g., Down's syndrome (mongolism), can be diagnosed by amniocentesis (withdrawal of fluid from around the foetus, and usually performed at the fourth month of pregnancy) and subsequent examination of foetal cells in amniotic fluid, so that consideration can be given to a therapeutic abortion being performed.

Zarfas,** in his article "The mentally retarded and the physician," points out that if good obstetrical and prenatal care were carried out there would be a significant reduction in the numbers of mentally retarded children as well as those with learning difficulties.

The incidence of premature births, birth injuries, and infections and injuries during the neonatal period (first 28 days of life) must be reduced to a minimum in order that the number of handicapped children can be decreased proportionally.

RECOMMENDATION 40
THAT public health and social service agencies ensure that family planning services and genetic counselling services be made readily available to people in need of these.

* Task Force Report on the Cost of Health Services in Canada, 1969 – Section on Family Planning and Genetic Counselling.

** Zarfas, D. E. "The mentally retarded and the physician," *Canadian Medical Journal,* 102 (7), 733-735, April 11, 1970.

RECOMMENDATION 41
THAT the Province ensure that, in each area, prenatal, obstetrical, and neonatal advice and services of a high standard are provided.

(c) **Accident Prevention**

In the age group 0-34 years, accidents of all types are the chief cause of death in Ontario (i.e., 7,935 deaths in the years 1962-1966). In addition, accidents are a major cause of conditions requiring rehabilitation services, as shown in the Annual Report on Accidents in Saskatchewan, 1960, when 14,629 persons received in-patient care in hospitals because of accidents. The Canadian Public Health Association, in its Policy Statement on Accident Prevention* recommended that public health departments be responsible for accident prevention programmes at local level.

In addition, in "Guiding principles for the provision of Occupational Health Services," by the Canadian Medical Association, 1967, it is stated:

Occupational Health Services are designed to maintain and improve the health of employees, so that each individual may function as a productive self-respecting happy worker for a maximum period of time.

The occupational health service should be considered as one aspect of an overall public health programme in the community.

These principles are to be highly recommended and, since it is desirable that every employed person be involved, provision should be made for occupational health services to small industries unable to support their own, and this should be provided by the local health units.

RECOMMENDATION 42
THAT local health units promote the development of accident prevention programmes at local level.

* Canadian Public Health Association, "Policy Statement on Accident Prevention," *Canadian Journal of Public Health*, 58 (9), September 1967.

RECOMMENDATION 43
THAT local health units provide an occupational health service to industries which are unable to support their own service due to their size.

(d) Prevention of Infection

Immunization against infectious disease is the most easily understood example of effective preventive care, as has already been mentioned in regard to poliomyelitis.

The German measles (rubella) virus produces a mild usually uncomplicated infection in a child but, if infection occurs in the first three months of pregnancy, it may cause in the developing foetus one or a combination of congenital heart disease, blindness, deafness, or brain damage. The mumps virus has also been found to cause malformations, in the first three months of pregnancy.* Fortunately, vaccines against rubella and mumps have recently been produced which give an immunity to these diseases.

It is therefore desirable to reduce the incidence of infectious diseases, especially in childhood, by the widespread use of vaccines without cost to the recipients.

RECOMMENDATION 44
THAT the Ontario Department of Health, through the local health units, make available and promote the use of all appropriate vaccines known to prevent disabling infectious diseases.

(e) Emotional Maladjustment

The seriousness of emotional maladjustment, as a problem in Ontario, cannot be sufficiently stressed. It is therefore imperative that every effort be made to improve the emotional health of children and adolescents and the social structure in which they live, since this is of more value and less costly than the rehabilitation of mentally ill persons.

* Barnes, Allan C. Prevention of Congenital Anomalies from the Point of View of the Obstetrician.

RECOMMENDATION 45
THAT each region ensure that adequate services are available for the assessment and counselling of children of pre-school and school ages, who require these services.

(f) **Special Learning Situations**

In the Report of the Provincial Committee on Aims and Objectives of Education in the Schools of Ontario, 1968, (The Hall-Dennis Report), the following were recommended:

Special Learning Situation – Organization

The Problem: What should be done to improve the development and organization of special education?

87 – The Recommended solution: Recognize that the provision of special educational services to meet the needs of all children is a mandatory responsibility of school boards.

For Action by: School Boards, Department of Education.

91 – The Recommended Solution: Design an organizational model for special education within each jurisdiction which will provide for clinical services for diagnosis and assessment of children of pre-school and school age, and counselling service for parents and teachers.

For Action by: School Boards.

Special Learning Situations – Pre-school Education

The Problem: How can pre-school education become a part of the total system of education?

113 – The Recommended Solution: Provide pre-school programmes for children disadvantaged by physical handicaps or unusual circumstances.

For Action by: School Boards.

In the Report of the Committee on School Health of the American Academy of Paediatrics (1966), regarding this subject

it is stated:–

> *The acquisition of language skills, particularly reading, serves as the passkey to academic progress. Children who encounter persistent difficulties in learning to read are high-risk candidates for problems in academic achievement and school adjustment.*

It is therefore essential that there be early recognition of specific learning situations so that these can be dealt with at the beginning of the academic life, for example, by using private tutors and special methods of teaching, in order to prevent the affected children becoming emotionally disturbed or school drop-outs.

> *RECOMMENDATION 46*
> *THAT recommendations 87, 91, and 113 of the Report of the Provincial Committee on Aims and Objectives of Education in the Schools of Ontario, 1968, regarding Special Learning Situations be adopted and implemented by the Government of Ontario.*

(g) Geriatric Problems

In the geriatric population, the predisposing situations which must be considered to prevent acceleration of the senile process are social isolation, nutritional deficiencies, and minor disabling conditions (both mental and physical). This is confirmed in "Aging and Health" the background paper prepared for the Canadian Conference on Aging, 1966. In addition, Kozakiewicz in an article* on this subject points out that in many countries the social welfare departments are responsible for most of the geriatric services.

> *RECOMMENDATION 47*
> *THAT local public health and social service departments co-ordinate their geriatric services to provide both medical and social aspects of care through the establishment of a geriatric clinic with associated community services in at least one hospital in each district.*

* Kozakiewicz, M. "The Gerantological and Geriatric Trends in Western Europe," *Manitoba Medical Review*, 44 (7), August-September 1964.

Appendix A

AN ESTIMATE OF THE NUMBER OF PERSONS WITH HANDICAPPING CONDITIONS ONTARIO, 1969

APPENDIX A

An Estimate of the Number of Persons with Handicapping Conditions Ontario, 1969

INTRODUCTION

This document presents an estimate of the number of persons with handicapping conditions in Ontario, 1969. The data presented are based on findings of the U.S. National Health Survey covering the period July 1963-June 1965[1] and the Canadian Sickness Survey of 1950-51.[2]

The estimated population of Ontario on June 1, 1969, prepared by the Dominion Bureau of Statistics, was used in preparing the estimates.[3] A comparison of the three populations, two health survey populations and the estimated population of Ontario, is made in Appendix I.[4,5]

The I.C.D. rubrics used in the U.S. National Health Survey for chronic conditions are shown in Appendix II(A).[6,7] The special list for permanent physical disability used in the Canadian Sickness Survey is given in Appendix II(B).[8]

Definitions of the terms used in the U.S. Survey are listed in Appendix III(A) and those used in the Canadian Sickness Survey in Appendix III(B).

LIMITATIONS OF THE ESTIMATES

The population sampled by the Canadian Sickness Survey, 1950-51, does not include residents of institutions, military establishments,

Indian reservations, and remote areas. The population used by the U.S. National Health Survey is also the noninstitutional, civilian population.

Because both surveys exclude persons in institutions and military establishments, the data may under-estimate morbidity rates for the total population. Under-estimation may also selectively affect specific chronic conditions in which the rate of institutionalization is high. Persons 65 years and over are incompletely described because they form a relatively disproportionate share of the persons resident in long-term-stay institutions.

In the Canadian Sickness Survey, when a chronic condition or a permanent physical impairment was reported, it was ascertained if the disability was permanent and, only if so, it was recorded on the Supplementary Permanent Physical Disability Form. In the U.S. National Health Survey, a condition was considered chronic if it was described in terms of one of the conditions on the "Check List of Chronic Conditions and Impairments" (Appendix IV) or if it was said to have been first noticed more than three months before the interview, and all chronic conditions causing activity limitation were included in the study.[9]

The Canadian Sickness Survey would not necessarily classify "a year-long sickness" as a permanent physical disability, but it is probable that such a condition was included in the chronic conditions causing activity limitation in the U.S. Survey.[10]

METHOD OF ESTIMATE

The method used in preparing estimates of the number of persons, by age and sex, in a particular activity limitation group, is as follows:

> The percentages of persons by activity limitation status, age and sex, obtained from the U.S. National Health Survey, were applied to the DBS population estimate for the same sex and age group, for Ontario, 1969, to give a correct estimate of the number of persons affected.[11]

Estimates of the number of persons, by age and sex, who reported permanent physical disability and year-long sickness, were made using data from the Canadian Sickness Survey.[12,13]

THE ESTIMATES

Table I presents estimates, based on the U.S. National Health Survey, of the number of persons, by age and sex, Ontario, 1969, with one or more chronic conditions, by the amount of activity limitation in three categories defined in the U.S. Survey.[11] It is noted that 902,000 persons or 12.1 per cent of the total population is estimated to have had a chronic condition causing some activity limitation.

Table II presents estimates, based on the Canadian Sickness Survey, of the number of persons, by age and sex, Ontario, 1969, with permanent physical disabilities, by broad severity groups – 529,000 persons or 7.1 per cent of the total population.[14]

Table III, also based on the Canadian Sickness Survey, shows the number of persons, by age and sex, Ontario, 1969, estimated to have year-long sicknesses – a total of 380,000 persons or 5.1 per cent of the total population.[12]

The total number of persons estimated to have either a permanent physical disability or a year-long sickness is 909,000 or 12.2 per cent of the total population.

These tables indicate that 9.1 per cent of the population reported either year-long sicknesses or minor and moderate physical disability in the Canadian survey, and 9.9 per cent reported activity limitation in the first two categories of the U.S. survey. The time spread and the variation in definitions between the Canadian survey data and the U.S. survey data is substantial.

Table IV presents the estimated number of persons in Ontario, 1969, with varied degrees of activity limitations by selected chronic conditions, based on the U.S. National Health Survey.[15] Heart conditions and arthritis and rheumatism are the two major causes of activity limitation among those unable to carry on their major activity – 41,000 and 27,000 persons respectively.

Table V presents an estimate of the number of persons in Ontario, 1969, with selected types of permanent disability by broad severity groups, based on the Canadian Sickness Survey.[16] In this case, too, heart conditions and arthritis and rheumatism are the two major causes of disability in the extreme groups. Here the estimated numbers are 44,000 and 27,000 persons, respectively.

SUMMARY

A total of 12.1 per cent of the population in the U.S. National Health Survey and 12.2 per cent in the Canadian Sickness Survey may be said to have had a handicap. The estimated number of persons affected in Ontario, 1969, would be approximately 906,000. A handicap here is defined as the disadvantage imposed upon a specific individual in his physical, vocational, and social activities by an impairment, disability, or chronic sickness (over three months duration).

Heart conditions are the major cause of handicap in the most severe disability and activity limitation groups – it is estimated that approximately 43,000 persons would fall in this category in Ontario, 1969.

Arthritis and rheumatism is the second major cause of handicap in the same category and approximately 27,000 persons would be involved in Ontario, 1969.

The limitations associated with these estimates should be kept in mind and this document should be used only as an indicator of the incidence and prevalence of handicapping conditions and as a basis for greater in-depth study.

April, 1970.

Vital and Health Statistics Unit,
Research and Planning Branch,
Ontario Department of Health.

TABLES

for

APPENDIX A

TABLE I

AN ESTIMATE OF THE NUMBER OF PERSONS
WITH ONE OR MORE CHRONIC CONDITIONS,
BY AGE AND SEX, AND ACTIVITY LIMITATION STATUS,
ONTARIO, 1969

Age and Sex	With Limitations But Not in Major Activity		With Limitation in Kind and Amount of Major Activity		Unable To Carry On Major Activity	
	Number[1]	Per Cent[2]	Number[1]	Per Cent[2]	Number[1]	Per Cent[2]
Both Sexes						
All ages	246	3.3	492	6.6	164	2.2
Under 45 years	114	2.1	136	2.5	22	0.4
45-64 years	76	5.4	163	11.6	39	2.8
65 years and over	44	7.3	163	26.9	90	14.6
Male						
All ages	97	2.6	231	6.2	115	3.1
Under 45 years	52	1.9	69	2.5	14	0.5
45-64 years	30	4.3	77	11.1	31	4.5
65 years and over	13	4.9	70	26.7	57	21.7

Table I (Continued)

Age and Sex	Number[1]	Per Cent[2]	Number[1]	Per Cent[2]	Number[1]	Per Cent[2]
Female						
All ages	146	3.9	257	6.9	52	1.4
Under 45 years	64	2.4	70	2.6	8	0.3
45-64 years	45	6.4	85	12.0	8	1.2
65 years and over	32	9.3	93	27.1	31	9.0

[1] Numbers in thousands

[2] Age and sex specific percentages

Note: The summations of numbers may not add up to the totals since they are approximations arrived at by applying percentages of the U.S. N.H.S. population to the D.B.S. population estimate for Ontario 1969

Source: (a) "Age Patterns in Medical Care, Illness and Disability. U.S., July 1963–June 1965" – U.S. Public Health Service Publication No. 1000 – Series 10, No. 32, p. 46, Table 21.

(b) "Estimated Population for Sex and Age Group, for Canada and Provinces, June 1, 1969" – D.B.S. Catalogue No. 91-202 (Annual), p. 2.

TABLE II

AN ESTIMATE OF THE NUMBER OF PERSONS WITH PERMANENT PHYSICAL DISABILITY, BY AGE AND SEX, AND BROAD SEVERITY GROUP, ONTARIO, 1969

Age and Sex	All Severity Groups		Minor and Moderate Disability		Severe and Total Disability	
	Number[1]	Per Cent[2]	Number[1]	Per Cent[2]	Number[1]	Per Cent[2]
Both Sexes						
All ages	529	7.1	298	4.0	231	3.1
Under 15 years	40	1.8			—	—
15-24 years	—	—	56	1.6	—	—
25-44 years	118	6.1	76	3.9	45	2.3
45-64 years	184	13.1	105	7.5	79	5.6
65 years and over	155	25.5	62	10.2	98	15.3
Male						
All ages	294	7.9	175	4.7	119	3.2
Under 15 years			—	—	—	—
15-24 years	43	2.4	—		-	-

Table II (Continued)

Age and Sex	Number[1]	Per Cent[2]	Number[1]	Per Cent[2]	Number[1]	Per Cent[2]
Male						
25-44 years	69	7.1	48	4.9	–	–
45-64 years	102	14.7	61	8.8	41	5.9
65 years and over	71	27.0	31	11.9	40	15.1
Female						
All ages	235	6.3	119	3.2	116	3.1
Under 15 years	36	2.1	–	–	–	–
15-24 years	49	5.1	27	2.8	–	–
25-44 years	81	11.5	43	6.1	38	5.4
45-64 years	82	23.9	–	–	54	15.6
65 years and over						

[1] Numbers in thousands

[2] Age and Sex specific percentages

Source: (a) "Illness and Health Care in Canada, Canadian Sickness Survey, 1950-51" - D.B.S. Catalogue No. 82-518, p. 113, Table 17.

(b) "Estimated Population for Sex and Age Group, for Canada and Provinces, June 1, 1969" - D.B.S. Catalogue No. 91-202 (Annual), p. 2

– Reliable estimate not available.

TABLE III

AN ESTIMATE OF THE NUMBER OF PERSONS
WITH YEAR-LONG SICKNESS, BY AGE AND SEX
ONTARIO, 1969

Age and Sex	Total Population	Year-long Sicknesses	
	Number[1]	Number[1]	Rate[2]
Both Sexes			
All ages	7,452.0	380	51
Under 15 years	2,233.5	31	14
15-24 years	1,266.8	–	
25-44 years	1,941.2	97	50
45-64 years	1,403.0	126	90
65 years and over	607.5	97	160
Male			
All ages	3,721.8	164	44
Under 15 years	1,143.2	–	
15-24 years	641.4		-
25-44 years	978.6	39	40
45-64 years	695.3	56	80
65 years and over	263.3	37	139

Table III (Continued)

Age and Sex	Number[1]	Number[1]	Rate[2]
Female			
All ages	3,730.2	216	58
Under 15 years	1,090.3	–	–
15-24 years	625.4	–	–
25-44 years	962.6	58	60
45-64 years	707.7	72	101
65 years and over	344.2	63	183

[1] Number in thousands

[2] Rate per 1,000 Age and Sex specific

Source: (a) "Illness and Health Care in Canada, Canadian Sickness Survey, 1950-51" – D.B.S. Catalogue 82-518, p. 125, Table 36.

(b) "Estimated Population for Sex and Age Group, for Canada and Provinces. June 1, 1969" – D.B.S. Catalogue No. 91-202 (Annual), p. 2.

– Reliable estimate not available.

TABLE IV

AN ESTIMATE OF THE NUMBER OF PERSONS WITH ONE OR MORE CHRONIC CONDITIONS, BY SELECTED CHRONIC CONDITIONS AND ACTIVITIES LIMITATION STATUS, ONTARIO, 1969

Selected Chronic Conditions	All Degrees of Activity Limitation	With Limitation but not in major activity	With Limitation in kind or amount of major activity	Unable to carry on main activity
		Number in thousands[1]		
Persons limited in activity	902	246	492	164
Tuberculosis, all forms	6	1	3	2
Malignant neoplasms	11	2	4	5
Benign and unspecified neoplasms	9	2	5	2
Asthma-hay fever	46	17	22	8
Diabetes	23	5	12	6
Mental and nervous conditions	70	17	37	17
Heart conditions	144	26	77	41
Hypertension without heart involvement	55	12	33	9
Varicose veins	22	6	12	2
Hemorrhoids	10	2	6	2
Other conditions of the circulatory system	31	7	15	8
Chronic Sinusitis and bronchitis	24	8	12	4

Table IV (Continued)

Selected Chronic Conditions	Number in thousands[1]			
Other conditions of the respiratory system	20	3	9	7
Peptic ulcer	22	5	12	5
Hernia	23	4	14	4
Other conditions of the digestive system	38	8	21	9
Conditions of the genito-urinary system	42	12	23	8
Arthritis and rheumatism	139	29	83	27
Other diseases of the muscles, bones and joints	32	9	19	3
Visual impairments	51	7	25	19
Hearing impairments	18	4	9	6
Paralysis, complete or partial	37	5	14	18
Impairments (ex paralysis) of back or spine	70	19	45	6
Impairments (ex paralysis or absence) of upper extremeties	16	4	10	2
Impairments (ex paralysis or absence) of lower extremeties	53	16	28	9

[1] Summation of conditions causing limitation may be greater than the number of persons limited, because a person can report more than one condition as a cause of his limitation; on the other hand, they may be less because only selected conditions are shown.

Source: (a) "Chronic Conditions Causing Activity Limitation, U.S., July 1963 June 1965" – U.S. Public Health Service Publication No. 1000 – Series No. 51, p. 20, Table 3.

(b) "Estimated Population for Sex and Age Group, for Canada and Provinces, June 1, 1969" – D.B.S. Catalogue No. 91-202 (Annual), p. 2.

TABLE V

AN ESTIMATE OF THE NUMBER OF PERSONS WITH SELECTED TYPE OF PERMANENT DISABILITY, BY BROAD SEVERITY GROUPS, ONTARIO, 1969

Primary Cause of Disability	I.C.D.	All Severity Groups		Severe and Total Disability	
		Number[1]	Per Cent	Number[1]	Per Cent
All causes	001-799, Y50-Y88	529	100.00	231	100.0
Heart disease	400-443	69	13.1	44	19.1
Impairments due to accidents	Y65-Y68	67	12.6	–	–
Arthritis and rheumatism	720-727	63	11.9	27	11.8
Deafness	Y84-Y88	40	7.6	–	–
Blindness and near blindness	Y80-Y83	36	6.9	–	–
Chronic diseases of the nervous system	345-357	31	5.9	–	–
Other causes	Miscellaneous	222	42.0	–	

[1] Number in thousands

Source: (a) "Illness and Health Care in Canada, Canadian Sickness Survey, 1950-51" - D.B.S. Catalogue No. 82-518, p. 114, Table 18.

(b) "Estimated Population for Sex and Age Group, for Canada and Provinces, June 1, 1969" – D.B.S. Catalogue No. 91-202 (Annual), p. 2.

– Reliable estimate not available.

APPENDICES

for

APPENDIX A

A COMPARISON OF POPULATIONS:
U.S. NATIONAL HEALTH SURVEY, JULY 1963 – JUNE 1965
D.B.S. POPULATION ESTIMATE, ONTARIO, 1969
CANADIAN SICKNESS SURVEY, 1950-1951

Age and Sex	U.S. National Health Survey Population[1]		D.B.S. Population Estimate Ontario, 1969[2]		Canadian Sickness Survey Population[3]	
	Number[4]	Per Cent[5]	Number[4]	Per Cent[5]	Number[4]	Per Cent[5]
Both Sexes						
All ages	187,109	100.0	7,452.0	100.0	13,537	100.0
Under 15 years			2,233.5	30.0	4,116	30.4
15-24 years	132,053	70.6	1,266.8	17.0	2,049	15.1
25-44 years			1,941.2	26.0	3,903	28.9
45-64 years	37,898	20.2	1,403.0	18.8	2,415	17.8
65 years and over	17,158	9.2	607.5	8.2	1,056	7.8
Male						
All ages	90,692	48.5	3,721.8	49.9	6,817	50.4
Under 15 years			1,143.2 (30.7)	15.4	2,099 (30.8)	15.5
15-24 years	64,839 (71.5)	34.6	641.4 (17.2)	8.6	1,007 (14.8)	7.4
25-44 years			978.6 (26.3)	13.1	1,932 (28.3)	14.3

Appendix I (Continued)

Age and Sex	Number[4]	Per Cent[5]		Number[4]	Per Cent[5]		Number[4]	Per Cent[5]	
Male									
45-64 years	18,276	(20.1)	9.8	695.3	(18.7)	9.3	1,245	(18.3)	9.2
65 years and over	7,577	(8.4)	4.1	263.3	(7.1)	3.5	534	(7.8)	4.0
Female									
All ages	96,417		51.5	3,730.2		50.1	6,720		49.6
Under 15 years				1,090.3	(29.2)	14.6	2,017	(30.0)	14.9
15-24 years	67,214	(69.7)	36.0	625.4	(16.8)	8.4	1,042	(15.5)	7.7
25-44 years				962.6	(25.8)	12.9	1,971	(29.3)	14.6
45-64 years	19,622	(20.4)	0.4	707.7	(19.0)	9.5	1,170	(17.4)	8.6
65 years and over	9,581	(9.9)	5.1	344.2	(9.2)	4.7	520	(7.8)	3.8

[1] U.S. Public Health Service Publication No. 1000 Series 10, No. 32, "Age Patterns in Medical Care, Illness and Disability, U.S., July 1963–June 1965" (Table 21, p. 45).

[2] D.B.S. Catalogue No. 91-202 (Annual). "Estimated Population by Age and Sex Group, for Canada and Provinces, June 1, 1969."

[3] D.B.S. Catalogue No. 9005-515 (No. 11) "Canadian Sickness Survey 1950-1951" (Appendix 2, p. 37).

[4] Numbers in thousands.

[5] Percentages Total Population. Figures in parenthesis are age and sex specific percentages.

APPENDIX II(A)

I.C.D. RUBRICS USED FOR CHRONIC CONDITIONS IN THE U.S. PUBLIC HEALTH SURVEY

Conditions Causing Activity Limitation	I.C.D. Number
Tuberculosis, all forms	001-019
Malignant neoplasms	140-205
Benign and unspecified neoplasms	210-239
Asthma-hay fever	240,241
Diabetes	260
Mental and nervous conditions	083.1,083.2,300-324 326.3,326.4,790 except 790.1
Heart conditions	410-443,782.1,782.2,782.4
Hypertension without heart involvement	444-447
Varicose veins	460,462
Hemorrhoids	461
Other conditions of the circulatory system	400-402,450-456,463-468 782.0,782.3,782.5-782.9
Chronic bronchitis and sinusitis	502,513
Other conditions of the respiratory system	510.0,511-527(except 513),783
Peptic ulcer	540-542
Hernia	560,561

Appendix II(A) (Continued)

Conditions Causing Activity Limitation	I.C.D. Number
Other conditions of the digestive system	530-539, 543-553 (except 550) 570-587 (except 571), 784,785
Chronic conditions of the genito-urinary system	591-637,786,789
Arthritis and rheumatism	720-727
Other diseases of the muscles, bones and joints	730-744
Visual impairments	X00-X05[2]
Hearing impairments	X06-X09[2]
Paralysis, complete or partial	X40-X69[2]
Impairments (except paralysis) of back or spine	X70-X72,X80,X81[2]
Impairments (except paralysis or absence) of upper extremities and shoulders	X73,X74,X86-X88[2]
Impairments (except paralysis or absence) of lower extremities and hips	X75-X77,X82-X85[2]

Source: U.S. Public Helath Service Publication No. 1000 – Series 10, No. 57, "Chronic Condition Causing Activity Limitation" Page 42.

[2] For details of X-code, see U.S. Public Health Service Publication No. 584-B 35, pp. 41-44.

APPENDIX II(B)

SPECIAL LIST FOR PERMANENT PHYSICAL DISABILITIES,
USED IN THE CANADIAN SICKNESS SURVEY, 1950-1951

I.C.D. Number	Conditions
001-799, Y50-Y88	All causes
345-357	Chronic diseases of nervous system
400-443	Heart Conditions
720-727	Arthritis and rheumatism
Y65-Y68	Impairments due to accidents
Y80-Y83	Blindness and near blindness
Y84-Y88	Deafness
Miscellaneous	Other Causes

Source: D.B.S. Catalogue No. 82-518, "Illness and Health Care in Canada, Canadian Sickness Survey, 1950-1951" (Appendix I, Page 71).

APPENDIX III(A)

Definitions of Terms Used in the U.S. Public Health Survey

Condition:

Any entry on the questionnaire which describes a departure from a state of physical or mental well-being. For purpose of each published report or set of tables, only those conditions which satisfy certain stated criteria are included.

Chronic Condition:

A condition is said to be chronic if (1) it is described by the respondent in terms of one of the chronic diseases on the "Check List of Chronic Conditions" or in terms of one of the types of impairments on the "Check List of Impairments," or (2) the condition is described by the respondent as having been first noticed more than three months before the week of the interview.

Impairment:

Chronic or permanent defects, resulting from disease, injury or congenital malformation. They represent decrease or loss of ability to perform various functions, particularly those of the musculo-skeletal system and the sense organs.

Prevalence of Chronic Conditions:

The number of chronic cases reported to be present or assumed to be present at the time of interview; those assumed to be present are cases described by respondent in terms of one of the chronic diseases on the "Check List of Chronic Conditions" and reported to have been present at some time during the 12-month period prior to the interview.

Chronic Activity Limitation:

Persons with chronic conditions with activity limitation are classified into three categories according to the extent to which their activities are limited as a result of these conditions.

1. Persons unable to carry on major activity for their group.

2. Persons limited in the amount or kind of major activity performed.

3. Persons not limited in major activity but otherwise limited.

Major activity refers to ability to work, keep house, or go to school; for pre-schoolers it refers to participation in ordinary play with other children.

Source: U.S. Public Health Service Publication No. 1000 – Series 10, No. 51, "Chronic Condition Causing Activity Limitation, U.S. July 1963 – June 1965" (Appendix II, pp. 42-43).

APPENDIX III(B)

Definitions of Terms Used in the Canadian Sickness Survey (1950-51)

Only chronic conditions and permanent physical impairments which caused disability that was permanent were coded in the Supplementary Permanent Physical Disability Form.

Each case was assigned, according to its degree of severity, to one of four severity groups:

(a) **Severity Group 1: Minor**

All chronic disabilities, deformities, and amputations which did not interfere to any practical extent in day-to-day functioning on the job or at home.

(b) **Severity Group 2: Moderate**

All chronic disabilities, deformities, and amputations which appeared to have only a localized effect on conduct in daily employment or at home but did not seriously affect a person's general way of life.

(c) **Severity Group 3: Severe**

All chronic disabilities, deformities, and amputations which interfered considerably with work or normal home responsibilities. Persons in this group were not totally bed-ridden but generally had to take life easy, take much extra rest, or be confined to bed during acute phases of disability.

(d) **Severity Group 4: Total**

All chronic disabilities, deformities, and amputations which largely necessitated confinement to bed, a wheelchair, or a sitting position. In addition, assistance was usually required in carrying out the simple functions of everyday life. (pages 74-75)

Illness: (Page 72) A disturbance in the state of health of an individual, reported by informant in the form of a diagnosis, a group of related symptoms or a single symptom. Illnesses include injuries and confinements as well as diagnosis of

disease and undiagnosed symptoms.

Sickness: (Page 34) A disturbance in the state of an individual, but it was a general experience of ill health which could be identified without reference to its specific diagnostic components. It was also called a complaint period, which could include one or more specific illnesses (diagnoses).

Complaint Period: (Page 73) A complaint period or sickness is a series of days, ranging from a single day to a period covering the entire survey year, throughout which time a person was reported as continuously experiencing a disturbance in his state of health, and was at no time free of symptoms. The disturbance may have been due to a single illness throughout the period or to several illnesses which overlapped or were suffered concurrently.

Year-long Sickness: (Page 36) A year-long sickness could be formed of either one year-long illness or two or more overlapping or concurrent illnesses, if these illnesses did not leave the affected person free of symptoms during the entire survey year. They were considered as a sickness period of one year's duration. The number of year-long sicknesses would, therefore, be equal to the number of persons suffering from those sicknesses.

Source: "Illness and Health Care in Canada, Canadian Sickness Survey. 1950-1951" – D.B.S. Catalogue No. 82-518, (occasional). Pages as indicated.

APPENDIX IV

CHECK LIST OF CHRONIC CONDITIONS AND SELECTED IMPAIRMENTS (U.S. PUBLIC HEALTH SURVEY)

A – Chronic Conditions

No.	Condition	No.	Condition
1	Asthma	15	Stomach ulcer
2	Tuberculosis	16	Any other chronic stomach trouble
3	Chronic bronchitis	17	Kidney stones or chronic kidney trouble
4	Repeated attacks of sinus trouble	18	Mental illness
5	Rheumatic fever	19	Arthritis or rheumatism
6	Hardening of the arteries	20	Diabetes
7	High blood pressure	21	Thyroid trouble or goiter
8	Heart trouble	22	Any allergy
9	Stroke	23	Epilepsy
10	Trouble with varicose veins	24	Chronic nervous trouble
11	Hemorrhoids or piles	25	Cancer
12	Hay fever	26	Chronic skin trouble
13	Tumor, cyst or growth	27	Hernia or rupture
14	Chronic gallbladder or liver trouble	28	Prostate trouble

B – Selected Impairments

No.	Condition
1	Deafness or serious trouble hearing with one or both ears
2	Serious trouble seeing with one or both eyes even when wearing glasses
3	Cleft palate
4	Any speech defect
5	Missing fingers, hand, or arm – toes, foot, or leg
6	Palsy
7	Paralysis of any kind
8	Repeated trouble with back or spine
9	Club foot
10	Permanent stiffness or any deformity of the foot, leg, fingers, arm, or back
11	Any condition present since birth

Source: U.S. Public Health Survey Publication No. 1000 – Series 1, No. 2 – "Health Survey Procedure," page 26.

References

1. "Chronic Conditions Causing Activity Limitation, U.S. July 1963-June 1965" – U.S. Public Health Service Publication No. 1000 – Series 10, No. 51.

2. "Illness and Health Care in Canada, Canadian Sickness Survey, 1950-1951" – D.B.S. Catalogue No. 82-518.

3. "Estimated Population by Sex and Age Group, for Canada and Provinces, June 1, 1969" – D.B.S. Catalogue No. 91-202 (Annual).

4. "Age Patterns in Medical Care, Illness and Disability, U.S., July 1963-June 1965" U.S. Public Health Service Publication No. 1000 – Series No. 32, p. 45.

5. "Canadian Sickness Survey, 1950-51 Illness by Class of Illness, Age and Sex" · D.B.S. Catalogue No. 9005 515 (No. 11), p. 37.

6. Chronic Conditions Causing Activity Limitation, op. cit., p. 42.

7. "Selected Impairments by Etiology and Activity Limitation, U.S., July 1959-June 1961" – U.S. Public Health Service Publication No. 584 – B 35, pp. 41-44.

8. Illness and Health Care in Canada, op. cit., p. 71.

9. "Health Survey Procedure" – U.S. Public Health Service Publication No. 1000, Series 1, No. 2, p. 26.

10. Illness and Health Care in Canada, op. cit., p. 36.

11. Age Patterns in Medical Care, op. cit., p. 46.

12. Illness and Health Care in Canada, op. cit., p. 43.

13. Ibid. p. 125, Table 36.

14. Ibid. p. 113, Table 17.

15. Chronic Conditions Causing Activity Limitations, op. cit., p. 20.

16. Illness and Health Care in Canada, op. cit., p. 114, Table 18.

Appendix B

AGE DIVISION IN REHABILITATION SERVICES

APPENDIX B

Age Division in Rehabilitation Services

When considering the breakdown of groups for provision of rehabilitation services, there are many ways that one could consider making the division, but the only one that could be done with any ease administratively is to divide them into groups on the basis of age. The age grouping is a natural one because the facilities required for rehabilitation are different at the different age groups, since the problems encountered and the goals aimed at vary at different periods of life.

It is also possible to make a programme based on the total needs of an individual, when one considers the administrative grouping on an age basis, since it is not necessary then to get into the fragmentation of services which would follow making the grouping on a disease process basis or in any other way.

As mentioned above, the facilities required at different age groups are different, but the exact boundaries from one division to the next must be flexible, since the person who is in one age group might require the facilities which have been placed administratively in another age group. An example of this would be a person who has just passed out of the youth age group, but who is still engaged in activities which require the facilities of that group. A further example would be a person who is in the working age group, but who because of disease or injury required only domiciliary care, something which is provided for administratively in the older age group.

It is recognized that it is much simpler to administer an age

grouping, which has clear-cut boundaries, but this simply will not work when providing rehabilitation services. It is of the utmost importance that flexibility be recognized, and the final decision of whether or not a patient from one age group should be treated in the facilities ordinarily belonging to the other age group would have to be left to a medical screening team, which would have the final say in these matters.

It seems that there should be one group which one could entitle "youth," and this could extend from birth until 18 years. The upper limit of this group could be somewhat flexible, depending on the particular activity in which the person involved was engaged at the time of his 19th birthday. It is obvious that some people would need an extension under the youth division because they were receiving some training which would more logically be an extension of youth services. Some individuals who had already reached their adult environment by that age might leave the youth division a year or so early.

Various sub-groupings of this division have been suggested, splitting off the adolescent as a separate group, and the reasons for this are fairly evident. The only thing which is somewhat variable is the age at which this division might occur. It has been suggested that it be as low as 12 years, or as high as 16. From my own experience, the differences begin to arise around 14, and I am suggesting that the children's sub-group extend from birth till their 14th birthday, and the adolescent group from then until their 19th, plus or minus one year, as circumstances dictate.

I do not believe that it is necessary that completely separate facilities be built for adolescent rehabilitation services, but I believe that when adolescents are being treated as in-patients, or where they are being divided into groups for out-patient treatment, they should be separated either in a temporal or geographic fashion from the younger children.

The adult group would extend from the 19th birthday, and again this could be somewhat variable, until the 65th birthday. A sub-group here again seems to be indicated, and it has been suggested that this be at 45 years, because up to 45 years the main emphasis would probably be on medical rehabilitation, and on retraining for a different job or restoration to the old job. Past 45 years, retraining or returning to a job presents greater problems than in the younger age group, and this might better be separate.

The upper age limit here might be variable. It has been suggested that the upper limit be lower for women than for men because of the anticipated trend to lower the age for the old age pension to 60 for females. How this fits in with the known longer life expectancy for women over men I am not quite certain. I think the best way to look at this would be that the upper limit would be the 65th birthday, but that again some flexibility would be natural under special circumstances.

The final grouping would be from 65 until the end of life, and the reasons for this I feel are also self-evident and the accent on this group would be much less on job considerations than on housing, self-help and old age assistance.

Dr. J. E. Hall

Appendix C

REPORT OF ADVISORY COMMITTEE ON PROSTHETIC AND ORTHOTIC SERVICES

APPENDIX C

Report of Advisory Committee on Prosthetic and Orthotic Services

The Committee has met on six occasions since July 1968, and makes the following recommendations:

1. **Statistics**

Our assessment of the province's prosthetic and orthotic needs is hampered by the lack of accurate statistics. While special agencies such as The Workmen's Compensation Board and the Department of Veterans' Affairs can provide reasonably accurate figures, amputees not covered by them are often not clearly listed in hospital records. This is partly because a patient's diagnosis may be "arteriosclerosis with gangrene of the leg" but, since the necessary amputation is classified as "treatment," it is not always listed as a diagnosis and thus escapes listing by the Vital Statistics branch.

In the case of orthoses the situation is even worse, because most such patients are not admitted to hospital or, if they are, the diagnosis may be "spastic hemiplegia due to ruptured cerebral aneurysm" and no mention at all is made of any braces required.

We therefore recommend that:

(a) O.H.S.C. request hospital medical record departments to ask doctors to record, as part of the diagnosis, amputations and, in a separate category, any specific orthotic appliance needed by the patient.

(b) All prosthetic and orthotic agencies (including W.C.B. and D.V.A.) in the province be asked to complete an annual summary of the numbers of new appliances and repairs carried out by them. We understand that some such record is maintained by the Dominion Bureau of Statistics, but that the figures requested are not detailed enough and that it may be difficult to segregate the figures by provinces.

2. **Education and Training**

(a) There is a pressing need to increase the quality and numbers of prosthetists and orthotists in the province. Three main types of personnel are required:

i. **Professional Biomechanical Engineers**

These should have university degrees, probably in engineering, and should take a course specifically designed for them. After a first year common to all engineering specialities, they would then be diverted into "Biomechanical Engineering" which would have equal status with civil, mining, electrical and the other accepted streams of engineering undergraduate specializations. These engineers would be expected to be associated with university medical schools to participate in research and development in the broad field of biomechanics, which includes prostheses and orthoses. We recommend that the Provincial Government, through the Department of University Affairs, give every encouragement and assistance to universities in the province to develop such courses.

ii. **Professional Prosthetists and Orthotists**

These are people who understand the anatomical requirements for correct fitting and alignment of prostheses and orthoses. They are trained to measure the patients, supervise fitting and alignment, and to make the necessary adjustments.

iii. **Prosthetic and Orthotic Technicians**

These are skilled craftsmen who carry out the routine fabrication, plastic laminating, shaping and finishing of limbs and braces, but who do not have direct contact with patients.

Recent advances in prosthetic and orthotic technology,

specifically the use of standardized prefabricated components, are producing rapid changes in the training requirements for the individuals mentioned in (ii.) and (iii.) above. The traditional concept of training an artisan, first in the skills of manufacture, and then in the skills of fitting, is being replaced by the concept of having the two types of individuals we have described. But there is a persisting reluctance to separate the two types of educational requirements, and training programmes on this continent are still oriented toward training one individual to do both things. We think the moment is ripe for Ontario to take a pioneering step by establishing a training programme for professional prosthetists and orthotists as well as a technical school programme for prosthetic and orthotic technicians. The former could well be developed within existing schools of physical and occupational therapy, while the latter would be ideally suited for a community college (e.g., George Brown).

(b) Subsidize refresher courses for doctors, physical and occupational therapists, prosthetists and orthotists, and rehabilitation workers. It is our understanding that while the Department of Health already has some grants available for this purpose, they are not available for hospital personnel because such people are in effect employed by the O.H.S.C. and any expenses on their behalf must be included in their hospital's budget. We urge the Provincial Treasury Board to review policy in this respect and to alter the dispersal of its funds so that money is available where it is most needed.

(c) Maintain (and publicize the existence of) a central library of publications and journals relevant to the field so that interested individuals may quickly obtain information on new devices, recent developments, and refresher and training courses.

3. Stockpiling of Prefabricated Parts and Equipment

A major problem affecting the individual prosthetist and orthotist is the difficulty in quickly obtaining prefabricated parts, most of which come from the U.S.A. and Germany. He is hampered by delays in shipment, customs routine, and by not being able to take advantage of bulk purchasing. If there were a centralized agency in the province that would handle importations and stockpiling, and from which the individual prosthetist and orthotist could purchase his requirements, it would save time and, by permitting bulk purchase, save money. For example, we understand that a certain type of German artificial

hand is only available on this continent through a U.S. agent who charges about three times the price that the same hand costs in the United Kingdom, where it can be purchased directly from the manufacturer. We recommend that the Provincial Government enter into an agreement with the Federal Department of Health and Welfare to use the facilities of Prosthetic Services at Sunnybrook Hospital which is ideally organized for this purpose.

4. **Financial Subsidy to Patients Requiring Appliances**

At the present time, patients not covered by either the D.V.A. or the W.C.B. are often subjected to prolonged, frustrating and totally inhuman hardship while various levels of provincial, county and municipal governments determine their relative responsibility. It is urgently recommended that the Provincial Government take over the financial responsibility for the provision of appliances for these unfortunate citizens, and that this be centralized in one *and only one* provincial department. We deplore the fact that while the Department of Social and Family Services, through its Rehabilitation Branch, will provide appliances for individuals who can be rehabilitated to employment, it excludes the older citizen who is too old to be employed or who is retired.

5. **Regional Rehabilitation Centres**

It is urgently recommended that every region of the province have at least one out-patient rehabilitation centre, where clinic teams consisting of physicians, physical and occupational therapists, prosthetist and orthotist, social worker and rehabilitation councillor can direct the progress of patients requiring prostheses and orthoses. It is essential that such centres have attached to them *motel-like* accommodation where ambulatory patients may live during their training. At present, we are often obliged to admit such patients to an active treatment bed (which costs about $70.00 per diem in Toronto). It scarcely needs to be pointed out that motel accommodation at, say $15.00 per diem, would represent a substantial saving to the taxpayers.

Colin McLaurin, Ph.D., B.Sc., P.Eng., a member of this committee has recently brought distinction to Canada by being appointed Chairman, Committee of Prosthetic Research and Development, National Academy of Sciences, Washington, D.C. We are indebted to him for many of the ideas incorporated in this report and attach a verbatim copy of his recommendations which set forth in more detail the ideas summarized above. W. R. Harris, M.D., F.R.C.S.(C), Chairman

Bibliography

Bibliography

PUBLIC DOCUMENTS AND REPORTS

Canada. Department of National Health and Welfare. *Task Force Reports on the Cost of Health Services in Canada, 1969.*

Canada. *Recommendations of the Senate Special Committee on Aging.* Debates of the Senate, 1st. Session, 27th Parliament, Vol. 115(6), February 1966.

Ontario. Department of Education. *Living and Learning.* The Report of the Provincial Committee on Aims and Objectives of Education in the Schools of Ontario (The Hall-Dennis Report), 1968.

Ontario. Ontario Department of Health: Research and Planning Branch. Vital and Health Statistics. *Chief Causes of Death in Ontario: 1962-1966.* Special Report Number 42: 1969.

Ontario. Ontario Department of Health. *Second Report of the Perinatal Mortality Study in Ten University Teaching Hospitals.* Toronto. 1967.

Saskatchewan. Research and Statistics Branch, Saskatchewan Department of Public Helath. *Accident Facts: 1960.*

Geneva. *WHO Expert Committee on Medical Rehabilitation (second report).* World Health Organization Technical Report Series (419) 1969.

Statutes of Canada, 1953-4, Chapter 51:*The Canadian Criminal Code, (Abortion).* Section 237,238.

Statutes of Canada, 1968-9 Chapter 38: *Criminal Law Amendment Act, (Abortion).* Section 237.

Statutes of Canada, 1961, Chapter 26: *Vocational Rehabilitation of Disabled Persons Act.*

Revised Statutes of Ontario, 1960, Chapter 350: *The Rehabilitation Services Act.*

Report of the Royal Commission on Health Services. Vol. 1, 1964.

Kohn, Robert. "Emerging Patterns in Health Care." Submission to the Royal Commission on Health Services. 1965.

BOOKS

The Theory and Practice of Public Health. Edited by W. Hobsen (3rd. edition) London: Oxford University Press, 1969.

ARTICLES AND PERIODICALS

Bonnier, J. G. "The Role of a Health Department in the Field of Rehabilitation," *Canadian Journal of Public Health,* Vol. 54: 202-5, May 1963.

Canadian Public Health Association. Policy Statement on Accident Prevention. *Canadian Journal of Public Health,* Vol. 58(9): pp. 416, September 1967.

Dale, B. T. "Home Care in a Local Public Health Program," *Canadian Journal of Public Health,* Vol. 59: 302-304, August 1968.

Evang, Karl. "An Experimental Approach to the Prevention of Maladjustment and Mental Disease in Norway," International Health Communication, *Canadian Journal of Public Health,* Vol. 56: 128-130, March 1965.

Griffin, J. D. "Public Education for Mental Health - Some Critical Considerations," *International Journal of Health Education,* Vol. 12(3): 137-142, 1969.

Guymer, A. J. "Rehabilitation," *Physiotherapy,* pp. 132-5, April 1969.

Hastings, John E. F. "Rehabilitation and the Public Health," *Canadian Journal of Public Health,* Vol. 53(7): 279-83, July 1962.

Hirschfeld, A. H. and Behan, Robert C. "The Accident Process An Overview," *Journal of Rehabilitation,* pp. 27-31, January-February 1967.

Ingram, James M. "Changing aspects of abortion law," *American Journal Obstetrics and Gynecology,* Vol. 105(1): 35-42, September 1969.

Kozakiewicz, M. "Public Health Hints from United Kingdom, Western Europe, Scandinavia – Part 1," *The Manitoba Medical Review,* Vol. 44(4): 215-20, April 1964.

Kozakiewicz, M. "Rehabilitation Hospitals and Communities," *Medical Services Journal,* Canada. Vol. 23(11): December, 1967.

Kozakiewicz, M. "The Gerantological and Geriatric Trends in Western Europe," *The Manitoba Medical Review,* Vol. 44(7): 396-406, August-September, 1964.

MacMillan, Duncan. "After-Care in an integrated Mental Health Service," *British Journal of Social Psychiatry,* Vol. 2(4): 245-52, Autumn 1968.

Roberts, C. A. "Psychiatric and Mental Health Consultation," *Canadian Journal of Public Health,* Vol. 61: 17-24, January-February 1970.

Roberts, C. A. "Rehabilitation of the Mentally Ill," Reprinted from the *Bulletin of the Pan American Sanitary Bureau,* Vol. 54(6), June 1963.

Roberts, C. A. "Rehabilitation of the Mentally Ill," *Mental Hospitals,* pp. 9-12, December 1960.

Schwenger, Cope W. "A Brief on Accident Prevention," *Canadian Journal of Public Health,* Vol. 58: 417-24, September 1967.

Weston, Agnes B. and Pan, Woon-Tak. "Sixty-and-Up Health Centers: An objective Review of Geriatric Services of the Metropolitan Health Services, Vancouver," *Canadian Journal of Public Health,* Vol. 60: 151-5, April 1969.

Whitbridge, Margaret E. "Some observations on the Evolution of Rehabilitation in Canada," *Medical Services Journal Canada,* Vol. 23(6): 869-94, June 1967.

Young, John S. "Rehabilitation: The Accident Process in Reverse," *Journal of Rehabilitation,* pp. 32-33, January-February 1967.

Zarfas, D. E. "The mentally retarded and the physician," *Canadian Medical Journal,* 102(7), 733-735, April 11, 1970.

REPORTS AND PAMPHLETS

American Academy of Pediatrics. Report of the Committee on School Health, pp. 46-64, 1966.

Canadian Rehabilitation Council for the Disabled. Summary of Discussion Groups. National Consultation on Rehabilitation. Toronto: December 1969.

The Canadian Medical Association. Guiding Principles for the provision of Occupational Health Services, 1967.

Yates, Gordon. A Report to The Nuffield Foundation: Rehabilitation Services for the Disabled. Stoke-on-Trent, 1970.

UNPUBLISHED MATERIAL AND OTHER SOURCES

Barnes, Allan C. "Prevention of Congenital Anomalies from the Point of View of the Obstetrician." Address given at Second International Conference on Congenital Malformations, July, 1963.

Dunlop, Edward, Jousse, A. T. and Pearson, John D. "Expansion of

Rehabilitation Services for the Disabled." Submission to the Minister of Health, Province of Ontario. Toronto: August 31, 1961.

Kozakiewicz, M. "A Few Remarks on Rehabilitation and Community Planning." Presentation made on September 20, 1968, to the Task Force on Rehabilitation established by the Ontario Department of Health.

Kozakiewicz, M. "Social Assistance, Medical Rehabilitation and Health Services." Material submitted on September 20, 1968, to the Task Force on Rehabilitation established by the Ontario Department of Health.

Larkin, James M. "Rehabilitation in Canada." Address given at the Ontario Federation of Labour Seminar, Toronto, March 1968.

Peat, R. S. "Home Care and Public Health Programs for the Aged." Address given at the annual meeting of the Ontario Public Health Association, September 25, 1968.